HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

VOLUME 20, NO. 10, ABSTRACTS 1351-1500. OCTOBER 1980

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HOSPITAL ABSTRACTS

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HOSPITALS IN GREAT BRITAIN

1351. MAYBERRY, J. F. **The Dispensary and the Infirmary, Cardiff.** *Practitioner*, London, 1980, July, vol. 224, no. 1345, pp. 764, 765.

The Cardiff Dispensary was founded in 1822 and in 1837 was replaced by the Glamorgan and Monmouthshire Infirmary and Dispensary. During its first year, there were 42 in-patients and 23 out-patients. The numbers of children brought to the hospital for vaccination decreased after 1837 and the mortality rate was high. The hospital was staffed by a house surgeon who was paid £100 a year. He was responsible to the medical officer and the hospital committee for his actions and for the keeping of records. The matron received £20 a year and supervised patients and nursing staff. In 1864, 282 patients were admitted and of 1,654 patients visited at home, a large number had infectious diseases or conditions. A new building was opened in 1883 and became the King Edward VII Hospital in 1913. The hospital was renamed the Cardiff Royal Infirmary in 1923 and has continued throughout its existence to provide a casualty service and in-patient and out-patient care for the people of Cardiff.

HOSPITALS IN OTHER COUNTRIES

1352. KELLEY, Joseph B. **Health care in the Spanish social security system.** *Health and Social Work*, Albany, N.Y., 1980, May, vol. 5, no. 2, pp. 34-40.

In 1967 the Spanish social security system was expanded to provide health care, including in-patient and out-patient services, for most of the population. Since then the proportion of expenditure devoted to hospital care has increased considerably. The system respects the traditional physician-patient relationship. Extensive and successful use has been made of agreements with private and public hospitals to assure the maximum use of facilities and to reduce the need for construction. Steps have been taken to control the cost of pharmaceutical products and to regulate their production, distribution and advertising. The system recognizes the importance of psychosocial factors in illness and an expanded role for social workers. Social work education is based on a three-year course in about 40 or 50 schools of social work; the only graduate education available is in the School of Hospital Administration.

1353. AGERSNAP, T. Sygehusets organisation år 2000. **[Hospital organization in the year 2000.]** *Tidsskrift for Danske Sygehuse*, København, 1979, Oct./Nov., vol. 55, no. 9/10, pp. 195, 196.

In examining the prospects for Danish hospitals at the turn of the century, the author emphasizes that changes in organization will depend on political decisions, such as the decentralization of health care to smaller hospitals, and whether 'experts' or the 'customers' should have the power to determine future policies. He considers the question whether the expert's knowledge should be combined with the patient's

judgement with regard to further treatment. He then discusses the composition and function of joint decision-making bodies and how their policy criteria may differ. Turning to a more practical level, he links the growing number of sick people with the current tendency to discriminate against the old and comments that the resources of hospitals are made available more to suit experts' interests than to meet the actual needs of the population. In conclusion, he foresees a growing number of new smaller hospitals linked to social service centres in Denmark, where patients can be given more comprehensive treatment.

1354. FRIEDMAN, Emily. **Public hospitals: is 'relevance' in the eye of the beholder?** *Hospitals*, Chicago, Ill., 1980, May 1, vol. 54, no. 9, pp. 83-85, 88, 92, 93.

The debate over the appropriateness of government ownership of hospitals in the United States is an old one, but in this era of tight finances it is important that the question be placed in an objective context. This paper examines the overall concept of government ownership of hospitals, and what that ownership does or does not mean in terms of the necessity or appropriateness of these institutions. Topics discussed include: the role of tradition; the predominance of public hospitals in the provision of certain services; the diversity of public hospitals; the effect of changes which are taking place; and the role of public hospitals in the care of the indigent. The views of a number of administrators are included in the paper.

PLANNING, DESIGN AND CONSTRUCTION

DETERMINING SIZE OF HOSPITAL AND BED NEEDS

1355. LEFEBVRE, L. A., ZSIGMOND, Z. and DEVEREAUX, M. S. **A prognosis for hospitals: the effects of population change on the need for hospital space 1967-2031.** Ottawa, Ont., Supply and Services Publishing Centre for Statistics Canada, Health Division, Research and Analysis Section, 1979. 92pp. bibliog. (Catalogue 83-520E Occasional) $8.40

Between the late 1940s and early 1960s Canada experienced a large increase in the number of births. This boom will produce a distortion in the need for hospital services, culminating eventually in a heavy demand for geriatric care. This report attempts to show how population will affect Canada's expenditure on hospital services to 2031, assuming the present low fertility continues and there is no sudden change in medical technology. Detailed tables and charts are presented and some explanation is given of methodology and definitions. A bibliography is included.

HOSPITAL DESIGN

See also Abstract No. 1453

1356. DELRUE, J. Participatieve technieken bij ziekenhuisbouw. **[Participatory techniques in hospital building.]** *Hospitalia*, Brussel, 1980, April/June, vol. 80, no. 2, pp. 127-131.

Participation in hospital building should include the architect, building committee,

hospital board, staff and patients. A good building committee, with one leading and several working groups, is all important, but in practice patient involvement poses problems. In a recent social experiment two techniques were used: a systematic questioning of 300 patients; and hearings with community groups such as the elderly and immigrants. The results were somewhat frustrating, and recommendations for the future were prior consultations with the parties concerned and the setting up of a health council. Architectural contributions, complementary to the social experiment, are threefold. The first, concerned with better understanding of architectural designs, is a four-stage procedure of programme, draft, design and execution method, each stage to be carried out in three phases and interrupted for consultation with participating partners at appropriate points. The second method is a gradual building up of activities, starting from a basic level. Complementary to this is the formulation of operational policies for the project, based on studies of the activities in various hospital sections and a principal role for the building committee, giving it a participating voice. A third technique is the simulation game, with moduled area measurements laid out like a board game and a team to 'play' for the best solution. The methods are described in detail and illustrated with nine pictures.

1357. GOODMAN, H. Sygehusbyggeri i England år 2000. **[Hospital building in England in the year 2000.]** *Tidsskrift for Danske Sygehuse*, København, 1979, Oct./Nov., vol. 55, no. 9/10, pp. 208-212.

The author looks at the possible developments in hospital building in England by the year 2000, stressing that changes will be determined by political decisions and the state of the economy, as well as by the expectations of the community. He gives a brief historical survey of hospital development in the last 100 years, and examines some current trends in health care from the economic and political viewpoints. He goes on to discuss the physical size of hospitals, in terms of number of beds and whether they should be high-rise or low buildings. With regard to clinical requirements, he indicates the need for consultation with specialists whilst regretting the length of time taken and the bureaucratic procedures involved. He advocates greater standardization of design for hospitals, but not at the cost of lower standards or built-in inflexibility.

1358. WILLERS, J., editor. **Best buy hospitals: the Mk1 and Mk2 designs compared.** London, Department of Health and Social Security, [1980]. 57pp. bibliog.

During the late 1960s the Department of Health and Social Security developed a standard hospital design called 'Best Buy'. A revised version was used at King's Lynn Hospital in the 1970s. Apart from metric dimensions there were certain other modifications which make a comparison of King's Lynn with one of the original hospitals of interest. The designs are compared in detail, department by department.

DESIGN OF SPECIAL DEPARTMENTS

See also Abstract Nos. 1459, 1480

1359. FISHBACK, B. Wayne and GECKER, Frances F. **Cluster design meets special, shared needs.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 112, 116, 118.

Methodist Hospital of Gary, Ind., is concentrating its financial resources on relocating

three of its intensive care units—the emergency department, surgical suite, and intensive care and support services—into a new addition that is designed to fit the needs of new technology that has been developed in each specialty and to take advantage of shared needs among the units. Although the three areas share certain facilities and traits, their individuality also has to be accommodated. The emergency department will have a greater number and variety of cubicles and its own diagnostic X-ray facilities. The need of the operating suite for a floor-to-floor height of at least 15 feet has been achieved by using steel roof trusses over the area to provide a large, free interior space. The intensive care unit's 12 beds are in a curvilinear layout to allow direct supervision of all of them from a single nurses' station. The surgical recovery room is similarly designed. A plan of the new addition is included.

1360. GELSOMINO, Victor V. **Open design facilitates ICU monitoring.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 121, 122, 124.

The previously joint neonatal and paediatric intensive care units at Texas Children's Hospital, Houston, have been separated and relocated in order to modernize and expand them. The units are now one above the other at one end of the building's second and third floors. The paediatric unit has 12 beds and a six-bed recovery unit; the neonatal unit has 20 beds. Both areas are of open design to make patient monitoring easier. Each unit has two isolation rooms, a nurses' station and separate facilities for the nurses and physicians and a nourishment centre. The many other facilities include a family room in the neonatal unit. The mechanical, electrical and plumbing systems were replaced or upgraded and existing exterior windows were renovated. Many special features have been incorporated in the units. The nursing staff have found them to be efficient, functional and pleasant.

1361. **Audiology unit—Victoria Memorial Jewish Hospital, Manchester.** *Hospital Development*, London, 1980, July/Aug., vol. 8, no. 4, pp. 16, 17.

The new audiology unit at the Victoria Memorial Jewish Hospital, Manchester, consists of 14 rooms including review, fitting and repair rooms, special examination areas, a reception area and stores, and seminar and surgeons' rooms. Special design features of certain areas include sound-proofing and wheelchair access. Details are given of the construction of the external wall, partition walls, floor and roof. Exterior cladding was treated with Solignum. Drainage, sewerage and electrical ventilation systems run in the cavity between the floor unit and the existing ground level. The vestibular room, set aside for intensive investigation of hearing problems, has several special features including decoration in a matt black finish to avoid light reflex and a rubber sealant around the doors to prevent light leakage and produce a silent close to the door. This room is probably the most effective of its kind in the United Kingdom.

DESIGN OF SPECIAL HOSPITALS OR UNITS

1362. RUSSELL, Carolyn M., editor. **Planning and design for perinatal and pediatric facilities.** Columbus, Ohio, Ross Laboratories, 1977. vi, 100pp. bibliogs. $12.95

This book contains information, pictures and plans relating to paediatric and maternity facilities. Traditionally the obstetrical and nursing divisions of hospitals have

received low priority. Ideas are, therefore, put forward for conversions as well as the design of new facilities. The facilities covered include labour/delivery areas, postpartum rooms, normal newborn nurseries, and neonatal special care units. A glossary and numerous references are provided.

1363. **St. Ann's Hospice: a specially built single storey hospice.** *Building Trades Journal*, London, 1980, Aug. 15, vol. 180, no. 5365, pp. 20, 21.

This new hospice at Little Hulton in north-west Manchester is said to be the first specially built, single-storey, bungalow type hospice of its kind in the United Kingdom. To avoid a clinical atmosphere, the use of natural materials, both externally and internally, is very much in evidence. The shape of the building has been determined by the following requirements: (i) all wards to face south-east; (ii) the inter-relationship of the various functions within the building; and (iii) the possibility of future expansion with the minimum possible disturbance to staff. With wards and sitting rooms taking up almost the whole of the southern part of the building, a courtyard allows a southern aspect for other parts. The roof is pitched at 22½°, allowing all main services to be maintained within the roof void. External walls are of traditional construction with smooth red facing bricks. Internal walls are of brick or concrete block. Heating is by radiators, except in the chapel where it is under-floor. Three photographs and a site plan are included.

ENGINEERING SERVICES

1364. SCHUTYSER, K. Biomedische techniek: de visie van de gezondheidszorginstellingen. **[Biomedical technology: opinions of health care institutions.]** *Hospitalia*, Brussel, 1980, April/June, vol. 80, no. 2, pp. 124-126.

To maintain responsible and good patient care within their budgets, hospitals appeal increasingly for advice to engineers, whose role in building projects and purchase of equipment is now expanding to provision of informative knowledge. For general hospitals, the author foresees permanent appointments of engineers to supervise technical departments, fire safety, economic energy supply, refuse disposal and hygiene, with co-ordination between different hospitals. Such 'plant managers' would also provide hospitals with the opportunity to pioneer in the fields of environmental health, pollution control and re-cycling projects and regional road safety, and would form closer contacts with patients, diagnostics and therapies. In psychiatric and long-term institutions, which are technically less complex, the future role of engineers will be similar, but the emphasis will be on co-ordination between the various institutions. The author recommends similar posts in institutions for preventive medicine and the appointment of health care engineers by national and regional health authorities. In view of such possibilities, he suggests that courses in health care and related subjects should be included in the future training of engineers.

ELECTRICAL INSTALLATIONS AND EQUIPMENT

1365. ADGENT, A. **New switchboard at Glasgow Royal Infirmary.** *Hospital Engineering*, London, 1980, Aug., vol. 34, no. 6, pp. 18-20.

As a result of an increased use of electricity for items such as life support and

monitoring equipment, Glasgow Royal Infirmary has installed a new main switchboard and switchroom. Cables were cut back and re-routed and the supply from one transformer was transferred from the old switchboard to the new, with the minimum of inconvenience to hospital departments. The circuits of two existing standby generator units were adapted to suit the new switchboard's system, and a new audio/visual alarm system was installed in the hospital control room. The new switchboard consists of two outgoing fuse switch sections with a centre section for switches and contactors. Its electrical make-up and operation is described fully. In the event of supply failure, generator supplies can be in operation in 11 seconds, an acceptable delay. Since the completion of the installation, the hospital has experienced four power failures and the new switchboard has functioned very satisfactorily.

COMMUNICATION SYSTEMS

See also Abstract No. 1439

1366. BAYCH, Toni. **New system needs planning for success.** *Hospitals*, Chicago, Ill., 1980, April 16, vol. 54, no. 8, pp. 71, 72, 76.

Faced with the need to expand its telephone system, the Palos Community Hospital, Palos Heights, Illinois, chose to contract for the installation of a solid-state computerized telephone system. All aspects of the installation were carefully planned in advance and a timetable for the process is shown. Hospital department heads were consulted about their equipment needs and the new system, installed in November 1978, has been well received. The hospital administration believes that the new installation provides a cost effective and efficient telephone system for hospital employees, medical staff and patients.

ENERGY CONSERVATION

1367. UNKLESBAY, Nan and UNKLESBAY, Kenneth. **Food service equipment and energy costs.** *Hospitals*, Chicago, Ill., 1980, March 16, vol. 54, no. 6, pp. 83, 84, 86, 88, 89, 91.

Assuming that a substantial amount of catering equipment is not energy-effective, heating the surrounding atmosphere instead of the food, two administrative decisions regarding equipment appear feasible: (i) to replace existing equipment with more energy-efficient models; and (ii) to operate the existing equipment in more energy-efficient modes. This paper discusses the first option, covering: objective data; intuitive data; marketing data; research methods; and manufacturers' research and development data. Finally it presents guidelines which should assist those considering the purchase of new catering equipment.

EQUIPMENT, FITTINGS, FURNITURE

EQUIPMENT GENERALLY

1368. DUPONT, Charles and PESCE, Christine. Inventaire des équipements mobiliers. **[An equipment inventory.]** *Hôpital à Paris*, Paris, 1980, March/April, no. 56, pp. 119-123.

A detailed account of the establishment of an inventory of hospital equipment

throughout the Assistance Publique, which came into operation this year after many problems and false starts. The method of entering new items on the inventory is also described. The inventory will be used to show the amount to be set aside for depreciation, to establish an index of prices of medical equipment (a table covering the years 1966 to 1980 is presented), to provide a view of the amount purchased from individual suppliers each year and the number of each type of apparatus purchased, and to determine the equipment profile of each hospital.

MEDICAL EQUIPMENT

See Abstract Nos. 1428, 1430, 1489

SURGICAL EQUIPMENT

See Abstract No. 1486

LABORATORY EQUIPMENT

1369. NEWSOM, S. W. B. and MATTHEWS, Julie. **A microbiological survey of automated biochemical machines.** *Journal of Clinical Pathology*, London, 1980, June, vol. 33, no. 6, pp. 566-570.

The potential microbial hazards to laboratory staff from using an auto-analyzer, a flame photometer and a blood gas analyzer in the chemical analysis of blood was tested at Papworth Hospital, Cambridge. The three pieces of equipment were tested using tracers of bacteria in serum or water. The tests showed that the samplers in the equipment created less of a hazard than was suspected. The disinfection procedures used in the laboratory seemed to be adequate, although two per cent aqueous activated glutaraldehyde was more effective than hypochlorite and is, therefore, to be preferred. The use of plastic gloves for protecting hands when changing rinse cups and electrodes is also recommended.

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract Nos. 1376, 1474

CONDITIONS OF SERVICE

See Abstract No. 1375

SALARIES AND SUPERANNUATION

See also Abstract No. 1420

1370. SLOAN, Frank A. and STEINWALD, Bruce. **Hospital labor markets: analysis of wages and work-force composition.** Lexington, Mass., Lexington Books, 1980. xiii, 185pp. bibliog. ISBN 0 669 03385 5

Cost inflation is unusually high in the hospital sector in America and a major element

is staff costs. Various economic factors are described and a suggestion is made that hospitals pay higher wages because they are philanthropic rather than profit-seeking organizations. It is also suggested that the re-imbursement system and peculiar nature of hospital finance produce unusually high wage inflation. An extensive bibliography and some statistical appendices are included.

STAFF MANAGEMENT

See also Abstract Nos. 1377, 1378

1371. HAKANEN, Auli. Uusi sairaala-uudet tuulet—henkilöstöpolitiikassakin? **[A new hospital—new ideas in personnel policies?]** *Sairaala*, Helsinki, 1980, no. 5, pp. 218-220.

The staff of the new Päijät-Häme Central Hospital came from several other hospitals, so there were no unified rules covering all situations. A team was, therefore, appointed to make a personnel policy programme, consisting of representatives of the hospital, trade unions and the municipalities concerned. Some items of the programme were: (i) personnel administration; (ii) personnel planning; (iii) recruitment and career development; (iv) conditions of employment; (v) staff management; (vi) co-operation between personnel and employer (e.g. information, training, introduction, rationalization, protection at work, shop stewards' responsibilities, staff democracy); and (vii) personnel services (health care, kindergarten, housing, recreation, canteen). Because the programme was drawn up in co-operation with the employer's side, the principles have been accepted by both parties. Inequalities between members of staff have been diminished because rulings in similar cases are made on unified principles. There are fewer complaints, appeals and queries. Administration does not have to consider trivial cases. The programme constitutes a kind of handbook which new employees may consult—it must not be left to gather dust but must be revised continually. The hospital has only limited abilities to create special personnel policies, because of labour laws, labour market agreements and official legislation.

STAFF TRAINING

See Abstract Nos. 1381, 1405, 1410, 1466, 1479

STAFF WELFARE

See also Abstract Nos. 1369, 1431

1372. CALHOUN, Gary L. **Hospitals are high-stress employers.** *Hospitals*, Chicago, Ill., 1980, June 16, vol. 54, no. 12, pp. 171, 172, 175, 176.

Current studies show that some of the most stressful occupations are in the health care system and that the impact of dysfunctional stress is manifested in lower productivity, higher absenteeism, loss of work time from disease, premature death, increased accident rates, higher job turnover, increased work errors, narrowing of attention resulting in poor judgment, and problems that spill over into the home life.

It is incumbent upon hospital administrators to recognize and strive to mitigate those factors that lead to adverse effects of occupational stress. The paper lists: agents of stress; symptoms of stress; effective coping techniques; and typical stressful situations with some possible coping measures.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See also Abstract No. 1396

1373. CHRISTOFFERSEN, Erik. Behovet for profesjonalisering av administrasjonen innen helsevesenet. **[The need for professionalization of the health service administration.]** *Norsk Sykehustidende*, Oslo, 1980, vol. 53, no. 6, pp. 14, 16-18.

The author believes that only a professional hospital administrator can direct a sophisticated modern hospital. He recommends that future administrators should undergo a long theoretical training at university, followed by systematic training and practical experience on the job.

1374. LAFLEUR, Myrna Weber and STARR, Winifred K. **Unit clerking in health care facilities: a textbook of theory and practice.** Philadelphia, Pa., London, W. B. Saunders, 1979. xii, 763pp. ISBN 0 7216 5594 7 £16.25

Unit clerks perform non-clinical patient care tasks for nursing units; several hundred tasks are enumerated in the section of this book dealing with job descriptions. Section one of the manual deals with hospital orientation programmes and communication skills. Section two gives a basic grounding in anatomy and medical terminology. Sections three and four discuss clerical skills, such as preparation of the patients' chart and transcription of doctor's orders, and routines for admission, operations and discharge. The final part outlines management and human relation techniques relevant to unit clerks.

MEDICAL STAFF

See also Abstract Nos. 1405, 1410, 1450

1375. THOMPSON, Ian McKim, editor. **Handbook for hospital junior doctors.** London, British Medical Association, 1980. 95pp. £2.50

This handbook, prepared by the professional Secretariat of the BMA, sets out the terms of service of hospital junior doctors working in the NHS.

NURSING STAFF

See also Abstract Nos. 1382, 1401, 1405, 1474, 1495, 1498

1376. WINKELMANN, Ursula. Einflussfaktoren auf die Stellenbedarfsplanung des Pflegedienstes. **[Factors which influence the planning of nursing staff requirements.]** *Deutsche Krankenpflegezeitschrift*, Stuttgart, 1980, Sept., vol. 33, no. 9, pp. 516-518.

The author divides factors which affect staffing requirements into those which are

recognized and those which are not yet recognized in the official handbooks. The former include: absences on account of illness and holidays; the distinction between central staff and ward staff; shorter working hours; and the proportion of patients in a unit who are being kept on artificial respiration. Factors which are not recognized include: (i) beds in the intensive care unit which cannot be seen from the central nursing station; (ii) the number of staff required for small wards; this is not necessarily proportionally less than in a large ward; (iii) night staff requirements; these may depend on the size of the ward and the architectural lay-out of the hospital; and (iv) the introduction of new medical techniques. The author suggests that the figure of 15 per cent for absences given in the official handbooks should be increased to 18 to 20 per cent.

1377. GRANT, Nancy Kathleen. **Time to care: a method of calculating nursing workload based on individualized patient care.** London, Royal College of Nursing, [1980]. 186pp. bibliogs. ISBN 0 902606 58 1 £4.00

The main purpose of this study is to show a method of calculating the daily nursing workload, based on the concept of individualized patient care. In Britain there is no generally agreed method of fixing complements though there are various schemes, such as the 'Aberdeen formula'. This book starts with a literature survey and discussion, then explains: how to determine time required for planned and unplanned activities; calculation of workload; and how to use statistics. An extensive bibliography is included.

1378. STEVENS, Barbara J. **The nurse as executive.** 2nd edition. Wakefield, Mass., Nursing Resources, 1980. xvii, 365pp. bibliogs. ISBN 0 913654 62 0

This second edition has been expanded to include areas such as political strategies, industrial relations, and role theory. Nursing management is presented as a model with four components: goals, structures, resources and controls. The section on goals deals with the primary objectives of nursing care and includes consideration of philosophical and ethical issues. The structures are the matters relating to nursing in an organization such as the organization chart, divisional functions, staffing plans, assignment systems, policies, procedures and structured communication systems. The processes of nursing management include such mechanisms as communications theory, strategies and politics, as well as use of role, problem solving, and decision theory. Resources include human and material resources, with some reference to legal constraints on management. In the section on controls the author deals with quality control measures, performance appraisal, accreditation processes, education, supervision and research.

1379. SCHÖNING, Brigitte. Neue Wege in der Leistungsdarstellung der Krankenpflege. **[New directions in describing the performance of nursing care.]** *Deutsche Krankenpflegezeitschrift*, Stuttgart, 1980, Sept., vol. 33, no. 9, pp. 506, 508-511.

Methods of measuring the time required for individual nursing tasks are described. Each activity may be divided into eight phases: preliminary planning, communication, preparatory, execution, post-execution, documentation, and recommendations. Each phase is itself subdivided; for example, the documentation phase is divided into documentation of: (i) the course of the disease; (ii) the observations; and (iii) the conclusions. Three block diagrams show: (i) a typical allocation of time, in half-hour

units, in a morning shift in a 37-bed ward; (ii) the tasks performed by the different members of the ward staff; and (iii) the tasks of each category of staff (ward sister, nurse, auxiliary, student nurse) during the morning, again in half-hour units.

1380. HALLER, Karen B., REYNOLDS, Margaret A. and HORSLEY, Jo Anne. **Developing research-based innovation protocols: process, criteria, and issues.** *Research in Nursing and Health*, New York, 1979, June, vol. 2, no. 2, pp. 45-51.

This paper discusses the criteria and issues involved in a process of transferring research-based knowledge into innovation protocols for nursing practice. Three sets of criteria are identified: (i) those that pertain to evaluating and integrating studies that constitute a basis; (ii) those that address the issue of how relevant the base is for nursing practice; and (iii) those related to the potential for evaluation in the clinical setting. The innovation protocol covers: the need for change; description of the innovation; summary of the research base and the 'research-based' principles to guide implementation of the innovation; and implementation of the innovation and systematic evaluation of its effects. Ten such protocols have been developed by project staff and are being field-tested. It is suggested that the protocol may be seen as a form of methodological approximation between research and practice. It is also noted that the process involved in identifying research bases for use can serve to identify needs for future research.

ANCILLARY STAFF

1381. LEWIS, Edward. **The key is 'keep it practical'.** *Health and Social Service Journal*, Basingstoke, 1980, July 4, vol. 90, no. 4700, pp. 874-876.

Some 150 participants have attended two modules of a course in Wales for head and deputy head porters, and a third module is planned. Each module is designed to be practical, related to the job and short in duration. Emphasis is placed on participative training methods including exercises, case studies and small group discussions. Module One concentrates on practical skills, such as lifting and moving patients. Training in basic hygiene and a review of violent incidents occurring on hospital premises are also included in this module. Module Two concentrates on the practical side of certain management subjects, such as drawing up work schedules and staff rotas. The second day of Module Two is devoted to group exercises, such as 'Portex', and the final stage examines the procedures relating to deceased patients and their relatives. Both modules end with a review period and participants receive a certificate of attendance. The response to the Welsh scheme shows that more needs to be done to meet the training requirements of hospital portering departments.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 1353, 1471

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract Nos. 1405, 1406

1382. SCHMIED, Elsie. **Living with cost containment.** *Journal of Nursing Administration*, Wakefield, Mass., 1980, May, vol. 10, no. 5, pp. 11-17.

This article discusses ways in which nursing departments can control costs effectively

without sacrificing quality of care. Every nursing administrator should be familiar with the department's budget. Efficient inventory control and materials management systems help to contain supply and equipment costs. The comparative cost of using disposable or re-usable items should be subjected to cost-benefit analysis. Hospital systems and operations may need updating with a view to cost containment, for example, the method of scheduling selective surgery. Items concerning staff which may lead to cost containment include: (i) a review of fringe benefits; (ii) control of absenteeism; (iii) efficient safety measures to reduce claims for compensation; (iv) careful selection of staff; and (v) maintenance of job satisfaction. To be cost-effective, a staffing schedule must ensure high productivity and high quality; staffing with all registered nurses does not necessarily cost more. Careful planning of new treatment programmes can also save money. Finally, the setting up of a nursing department cost-containment committee can be useful.

1383. SPENCELY, Mary and MILLER, D. L. **Inflation control in the laboratory: does demand equal need?** *Journal of Infection*, London, 1980, March, vol. 2, no. 1, pp. 3-12.

The growth in the number of clinical investigations has been a cause of considerable concern for some years. Any rational attempt to curb demand requires an understanding of the reasons underlying the growth. Possible reasons explored in this paper are: (i) increasing numbers of patients treated; (ii) a change in the 'case mix' of patients; (iii) changes directed to improving patient care; (iv) the generation of extra tests by the laboratory; (v) the reluctance of laboratory staff to question the increased work load; (vi) failure to evaluate new tests adequately; (vii) poor communications; (viii) shortage of specialists; and (ix) insufficient critical teaching of medical students. It is concluded that there is no single or simple explanation of the increasing demands for clinical investigations. A number of factors interact and compound the problem. The review suggests that clinicians, laboratory staff, nurses and even administrators all bear responsibility for the increasing demands for laboratory investigations. Freedom to 'demand' these services has to be allied to a responsibility to ensure that resources so 'demanded' make a positive contribution not only to decisions about the care of patients, but also to the outcome of such care.

1384. VERHEYEN, P. A. Ziekenhuiseconomie anno 1980. **[Hospital economics in 1980.]** *Acta Hospitalia*, Leuven, 1980, vol. 20, no. 2, pp. 91-104.

Economics concerns a choice between scarce, alternatively available means according to a norm. In business economics this norm is profit making. In a centralized economy results are measured and compared in costs. In a public sector, such as the health service, costs are no regulator for consumers' needs and the basic question arises how in a decentralized system a community can decide the optimal size of the public service and finance its costs. In theory, decisions should be based on general preferences of individuals, economic use of provisions, social factors, costs of medical and technological developments and the aim of the service (rather than its non-profit making aspect). Production and distribution of goods and services should be regulated by planning. In practice, present developments are the measuring of health care costs in percentages of the gross national product, comparisons with costs of other services (e.g. education), and the effect of inflation. The future points to more central decisions on a national level. The author would prefer a patient-oriented development with more choice at

lower levels, achieved by co-operation between regions or hospitals in sharing of services and staff, flexibility in health care where alternatives are possible, and planning based on patients' needs decided by the medical staff within the budget. This would require good co-operation between the medical and administrative hospital sectors. The theories are worked out in detail including an illustrative table on family income and expenses.

1385. CRAIG, R. and OLSEN, M. **Getting the most out of food services.** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, pp. 28, 29.

The authors list several ways of increasing productivity in the catering area of the health service, including: (i) improved management; (ii) work simplification; (iii) improved equipment and work scheduling; (iv) training of workers; and (v) improved working conditions. Productivity is the ratio of the results to the resources used to achieve the results. Productivity improvement is, therefore, an increase in the ratio of outputs obtained by providing more effective food service systems at less cost. Different efficiency measures as applied to these systems are listed and include items such as inventory turnover, labour turnover and overtime. A comparison of the ratios shown over a period of time can demonstrate whether or not efficiency is improving. Evaluation of effectiveness measures can be determined by the complaints received from patients or by giving them questionnaires.

1386. MOREAU, R. Efficacité diagnostique, risques et aspects économiques des examens paracliniques. **[Diagnostic effectiveness, risks and economic aspects of clinical investigations.]** *Revue Hospitalière de France*, Paris, 1980, May, vol. 44, no. 331, pp. 693-696.

The number of supplementary diagnostic tests carried out continues to rise each year, and they are absorbing a growing proportion of the expenditure on health care. The author suggests that, before embarking on these supplementary tests, doctors and biologists should analyze: (i) the diagnostic value of each test; (ii) its risks; (iii) its macro-economic cost, i.e. its cost to the insurance fund; and (iv) its micro-economic cost, i.e. the cost per unit of production. He presents formulae which can be used in calculating the probable diagnostic value of a laboratory test or biopsy.

BED OCCUPANCY, ECONOMIC USE OF BEDS

See also Abstract Nos. 1355, 1487

1387. YOUNG, Wanda W., SWINKOLA, Robert Blane and HUTTON, Martha A. **Assessment of the AUTOGRP patient classification system.** *Medical Care*, Philadelphia, Pa., 1980, Feb., vol. 18, no. 2, pp. 228-244.

The need to identify and account for case mix differences has become particularly acute in the light of rapidly increasing hospital costs and recent directions in hospital reimbursement. The AUTOGRP patient classification system (APCS) was developed at Yale University to quantify hospital case mix. APCS consists of a fixed set of 383 patient categories, each of which is purported to contain patients consuming a similar amount of resources as measured by length of stay. It was based on some 500,000 medical records from 150 hospitals in Connecticut, New Jersey and South Carolina.

This assessment of APCS uses data from Western Pennsylvania patients to examine the reproducibility of the classification and the homogeneity of the resultant categories. The results indicate that the APCS categories examined were not statistically optimal using Western Pennsylvania data, and that individual diagnostic-related groups with APCS do not contain similar patients with respect to resource consumption and with respect to other patient and hospital characteristics.

1388. MILLER, Dulcy B. **Swing beds can work—with good planning.** *Hospitals*, Chicago, Ill., 1980, May 16, vol. 54, no. 10, pp. 97, 98, 100-103.

The swing-bed concept—the use of beds to provide either acute or long-stay care—is seen as an innovative approach to filling excess hospital beds. Variations of the concept include: (i) any bed in any location and at any time may be used for long-stay patients; (ii) a hospital with a distinct long-stay care section may also use its acute beds for long-stay care when needed; (iii) part of the hospital may be converted for long-stay patients; and (iv) an entire acute care hospital may be converted to a long-stay institution. Examples of these variations are examined. It is recommended that swing beds should be used exclusively for Medicare skilled nursing care patients who need interim long-stay care and short-stay rehabilitation. Swing beds should be grouped in a distinct part of the hospital, so that the staff can be trained to meet the special needs of long-stay patients and their families. Swing beds can help to eliminate under-used acute beds and thereby alleviate certain financial provisions and to mitigate delays for patients awaiting placement in skilled nursing facilities.

OFFICE MANAGEMENT AND METHODS

1389. SPRI. Grundjournal: journalmappar och lånestickor. **[Basic case record: case record folders and file markers.]** Stockholm, Spri, 1980. 19pp. (Spri Rapport 28)

Fifteen linear kilometres of medical files are generated each year in Sweden and there is, likewise, a proliferation of storage aids to deal with them. This report presents a detailed proposal for the design of a case record folder and a file marker. The following criteria are laid down: security, ease of handling, general applicability, availability, continuous file upkeep, strength, economy and flexibility. Two appendices contain an account of the field trials at Örebro Regional Hospital and a checklist to be used for the introduction of a new filing system.

ELECTRONIC DATA PROCESSING

See also Abstract Nos. 1413, 1467, 1470

1390. BALL, Marion J. and JACOBS, Stanley E. **Information systems: the status of level 1.** *Hospitals*, Chicago, Ill., 1980, June 16, vol. 54, no. 12, pp. 179, 181, 182, 184, 186.

First generation level 1 hospital information systems performed two functions: (i) transmission of requisitions and admitting/discharge/transfer transactions from nursing stations to ancillary departments; and (ii) provision of associated charge data

to the patient billing system. Additionally level 2 systems create and store a computerized medical record. Second-generation level 1 systems have largely removed the dichotomy between the two levels, and level 1 systems are now more easily distinguished on the basis of price and speed of installation than on the basis of functions provided. The development of level 1 system is outlined. Details are given of vendors of level 1 systems and the number of systems they have installed or are in the process of installing. A partial list of enhancement applications shows that second-generation systems offer capabilities far beyond the classic level 1 system, offering a selection from a range of applications to purchasers.

1391. LADOUCEUR, Robert. Le milieu hospitalier et l'informatique. **[The hospital environment and computerization.]** *Administration Hospitalière et Sociale*, Montreal, Que., 1980, May/June, vol. 26, no. 3, pp. 26-29.

The first of a series of articles containing practical advice on the use of computers in the hospital. The author suggests that there should first be an assessment of the hospital's requirements; consideration should then be given to whether the hospital should buy its own computer or employ the services of an agency or arrange a combination of the two. Computers can reduce costs, increase productivity and efficiency, improve the services provided to patients and improve the quality of the basic information required for decision-making. Before any attempt is made to analyze the hospital's requirements, management must be fully committed to the project; both management and individual departments must be involved in deciding what the system will contain. It is now generally accepted that the most successful systems are those designed by users. The operations of every department must be carefully examined, and a person with authority to take decisions assigned to manage the whole computer project.

1392. SHIMMINS, J. G. and HENERY, Morag. **Hospital service department computing in Glasgow.** *Medical Laboratory Sciences*, London, 1980, July, vol. 37, no. 3, pp. 205-214.

When two existing IBM 1130 computers serving biochemistry departments in the Greater Glasgow Health Board were due for replacement, no obvious transferrable systems were found. This paper discusses the rationale and practical problems of establishing an integrated network of computer services for the service departments in the region's hospitals. Rigid guidelines were drawn up to determine which departments required standard computing systems. In order to justify its cost, the system had to achieve greater productivity and higher quality control. Details of the hardware chosen, based on DEC PDP 11 computers, are given. Existing applications in some of the hospitals are described briefly. They are in biochemistry, radiology, haematology, microbiology and histopathology. The aim is to have a system providing computer facilities to all of the service departments in each of the six hospital complexes in Glasgow, with a network of up to 50 ward terminals.

1393. ROSS, Tamara. **When in France . . .** *Nursing Mirror*, Sutton, 1980, Aug. 28, vol. 151, no. 9, pp. 22-24.

The Centre Hospitalier de Cannes has 560 acute and 280 long-stay geriatric beds. It is the pilot site for data processing in a distributed network system, introduced by the

regional health authority in Marseilles, covering 13 district general hospitals. A central computer at regional headquarters is linked to a smaller computer in each hospital with terminals in the various departments. An IBM 3791 Controller was installed at Cannes three years ago. The applications and advantages of the system are outlined. Comparisons are made with Great Britain, where the general picture is remarkably similar. Misgivings regarding staff redundancies and reduced job satisfaction are not borne out by the experience of the Cannes Hospital, but there is a danger that, in the long run, the personal element in patient care could be stifled by over-standardization.

1394. PRIEST, Stephen L. and others. **Computerized O.R. log system has many uses.** *Hospitals*, Chicago, Ill., 1980, June 1, vol. 54, no. 11, pp. 79-82.

When the operating theatre committee of the 311-bed Brockton (Mass.) Hospital decided to investigate computer methods of retrieving operating theatre information, it first reviewed the existing manual reporting system. Using the manually prepared monthly report as a basis, a subcommittee developed the output report, input form and coding system. Under the new system, the circulating nurse completes a four-copy input form. Distribution is: (i) permanent surgical suite log book; (ii) data processing department for validation and computer verification; (iii) patient's charts; and (iv) pathology department for tissue committee auditing. Output comprises: (i) operating statistics report, listing major and minor scheduled and emergency cases by specialty on a monthly and a year-to-date basis; (ii) weekday operating theatre use by physician; (iii) operating theatre procedure report; and (iv) special reports as required. Comparison of the costs of the manual and computer systems is difficult, but reporting time has been cut by half and the availability of data on which to make administrative, staffing, supply and scheduling decisions has resulted in a more efficient and more fully staffed surgical suite.

LIBRARIES AND INFORMATION SERVICES

See also Abstract Nos. 1390, 1465

1395. LEWIS, M. Joy. **Staffing and management of hospital and welfare libraries.** Brussels, IFLA, 1977. 7pp.

Libraries for hospital patients and people confined to other institutions or their own homes continue to be the 'Cinderella' service of librarianship. The author describes her employment of work measurement techniques in studying these libraries as part of a project to investigate and produce standards for the staffing of United Kingdom public libraries. As an example, activities involved in a visit to a hospital ward are analyzed and timed. The staff of hospital, housebound and institutional libraries are characterized by personal dedication and compassion rather than familiarity with and use of management techniques, but they are urged to study the report (Department of Education and Science. *The staffing of public libraries.* London, HMSO, 1976. 3 vols.) with a view to planning and improving their services.

1396. SOLOMON, Linda. **Basic library tools for health administrators.** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, pp. 41-43.

The library of the Canadian Hospital Association has material covering all aspects of health administration in Canada and lends more than it borrows. Library services

are promoted by its publications, which include *Dimensions in Health Service* and *The Health Administrators' Library*, a full, up-dated, listing of the library's contents. All health organizations with a library can borrow through inter-library loan. For those wishing to trace material, or those organizations wishing to set up a health administration library, the author lists other bibliographical sources and basic textbooks which are useful in the health administration field in Canada. The two definitive indexing and abstracting works are: (i) *Hospital Literature Index;* and (ii) *Abstracts of Health Care Management Studies*. She also lists six periodicals and a number of dictionaries, directories, series and reports. Locating statistical literature of use to the health administrator is difficult as few sources provide access to comprehensive information. The success of a user request made in a library depends upon: (i) a clear explanation of the information required; (ii) the availability of the information; and (iii) how well the relevant publications have been recorded.

ORGANIZATION AND METHODS, WORK STUDY

See Abstract No. 1379

MEDICAL RECORDS

See Abstract Nos. 1389, 1397, 1470

HOSPITAL STATISTICS

1397. UNITED STATES. NATIONAL COMMITTEE ON VITAL AND HEALTH STATISTICS. **Uniform hospital discharge data: minimum data set.** Hyattsville, Md., National Center for Health Statistics, 1980. ix, 21pp. (DHEW Publication No. (PHS) 80-1157)

Systematic planning requires uniform terminology, definitions and tabulations. The need for financial information and the requirements of medical audit have provoked an effort to standardize during the 1970s; by 1973 the development and testing of the Uniform Hospital Discharge Data Set (UHDSS) was completed. The information collected consists of: personal identification, date of birth, sex, race, residence, hospital identification, admission and discharge date, consultant, diagnosis, procedures, circumstances of discharge, and means of payment. The definitions used in UHDSS are explained and certain of the underlying criteria used in setting up the system are described.

PUBLIC RELATIONS

1398. EDWARDS, Suzanne S. **The benefits and the risks of publicity.** *Hospitals*, Chicago, Ill., 1980, March 1, vol. 54, no. 5, pp. 94, 95.

Publicity can be a mixed blessing for an institution, and a hospital's desire for positive publicity must be balanced against the risks entailed in exposure to the media. In most hospitals, it is the responsibility of members of the public relations staff to help evaluate these risks. They must proceed on the understanding that the hospital and the editors and producers may, and often do, have a different conception of the most appropriate

use of limited and valuable column inches and air time. An institution's policy governing the handling of inquiries about patients by the public relations staff must be thoroughly communicated to all hospital staff so that they know when to protect the patient's right to privacy and when to acknowledge the media's right to report what is newsworthy.

LEGAL AND ETHICAL ASPECTS OF HOSPITAL ADMINISTRATION

See also Abstract No. 1493

1399. FLECHEUX, Georges. Le secret médical. **[Medical confidentiality.]** *Hospitalisation Privée*, Paris, 1980, June/July, no. 204, pp. 24-31.

The psychiatrist obtains a particularly intimate view of his patient's life and secrets and those of his family. The treatment of his patient may require that these secrets be shared with family and hospital staff. The family needs to know what may and may not be discussed with the patient, for example. The staff need to know what behaviour to expect. The psychiatrist may be called upon to give evidence in court about his patient. The author examines the legal aspects of medical confidentiality in relation to civil cases, criminal cases, and fiscal matters. In each instance he tries to assess to what extent the interests of society must over-ride the interests of the patient.

1400. O'BRIEN, M. and MAHADEVAN, S. **A system for the ethical control of clinical research.** *Public Health*, London, 1980, July, vol. 94, no. 4, pp. 219-222.

When the Durham Area Health Authority evaluated its ethical control of clinical research, two findings caused concern: (i) none of the existing ethical committees monitored regularly the progress of research it had approved; and (ii) as a consequence, knowledge of the outcome of half of the research within the area was not readily available. Recommendations included: (i) replacement of the seven original ethical committees by one; (ii) adoption of standard forms for ethical appraisal; and (iii) continuing review of projects. The pattern of activity of the new area ethical committee is described.

1401. AMERICAN NURSES' ASSOCIATION. COMMITTEE ON ETHICS. **Ethics in nursing: references and resources.** Kansas City, Mo., American Nurses' Association, 1979. v, 31pp. $2.00

The first and largest section comprises a bibliography of over 300 items, most dating from the 1970s. Selected United States government publications are listed separately. Audiovisual aids relating to death and dying and to ethics are given in further sections, and a list of persons concerned with nursing ethics is also included.

OTHER SPECIAL ASPECTS

1402. PARKER, Scott S. and WARDELL, Kevin S. **Multihospital systems form a co-operative for sharing services.** *Hospitals*, Chicago, Ill., 1980, June 16, vol. 54, no. 12, pp. 79, 80, 82, 84.

Two years ago, 10 not-for-profit regional multihospital systems joined together in

an innovative co-operative called Associated Hospital Systems (AHS). The 10 systems own, lease or manage 104 hospitals with approximately 20,000 beds. Additionally, many of the individual systems contractually extend specific management services to at least 200 independent hospitals with 15,000 beds. The origins of AHS are outlined. The president of each member system sits on the board of governors. Limited interest 'councils' are the working bodies that supply essential support to the board. There are currently five: finance, health promotion, planning, shared purchasing, and quality assurance. Brief details are given of the work of the finance and shared purchasing councils. AHS is now implementing a long-term research project that is designed to evaluate the cost-effectiveness of multihospital systems and to identify future opportunities for improvement and development. AHS derives its funds primarily through dues and assessments to members. It has made considerable progress in two years, but there are obstacles that remain to be overcome.

FINANCE AND ACCOUNTING

FINANCE

1403. CANDILLE, Marcel. Les contraintes financières des hôpitaux à travers les siècles. **[Financial constraints on hospitals through the centuries.]** *Revue Hospitalière de France*, Paris, 1980, May, vol. 44, no. 331, pp. 699-720.

The history of French hospitals from the 12th century to the present day demonstrates that they have always been short of funds and have always lurched from one financial crisis to the next. The bulk of the hospitals' income in the past was derived from their endowments. Details of income and expenditure in the Hôtel Dieu in Paris over the centuries show how the crisis could nearly always be resolved by appealing to the public or to the government for funds, by holding fairs, or by mortgaging hospital property. The current crisis is different because most of the modern hospital's income is derived from insurance fund payments for services rendered.

1404. DUPERRÉ, Yvan. Le budget base zéro comme outil de management. **[Zero-base budgeting as a management tool.]** *Administration Hospitalière et Sociale*, Montreal, Que., 1980, May/June, vol. 26, no. 3, pp. 30, 32, 34-39.

The author reviews the history of zero-base budgeting since its inception in the US Ministry of Agriculture in 1960. Every year, each section in an organization is obliged to assess what would happen if its programmes were cancelled, to demonstrate why they should be retained, and to explore alternative solutions. In many ways zero-base budgeting is similar to traditional operational planning, but it rests on long-term objectives rather than on information from previous budgets. The author lists the advantages and disadvantages of zero-base budgeting and provides a useful 37-item bibliography.

1405. GRAVELLE, H. S. E. and WILLIAMS, Alan. **Health service finance and resource management.** London, King's Fund Centre, 1980. 113pp. bibliogs. (Project Paper No. RC6) £1.00

Five papers prepared in connection with the Royal Commission on the National Health Service (NHS) are presented in this book. The first paper discusses alternative

models of financing health services. The second describes one of those models as used in Britain's NHS, namely health service charges. A third paper discusses efficient management of resources in the NHS. The last two parts deal with specific resource management issues relevant to hospitals; these are clinician budgeting and the costs of training doctors and nurses.

1406. MONTFORT, Augustinus Petrus Wilhelmus Paulus van. **Production functions for general hospitals: an econometric analysis.** Utrecht, Nationaal Ziekenhuisinstituut, 1980. vi, 184pp. bibliog.

This investigation, commissioned by the Ministry of Health and Environmental Hygiene in the Netherlands, is part of a study of cost structures in hospitals. The production function is a relationship between inputs (staff, beds, drugs, etc.) and output (patients treated and services provided). After an introductory chapter the author describes how the production function is applied in various countries, including Britain. The later chapters give a detailed study of the theoretical framework and practical application of the technique in the Netherlands. The various indices and inter-hospital comparisons are discussed. Extensive reference is made to the literature.

1407. VINTEN, Gerald. **Budgeting in the pathology division.** *Gazette of the Institute of Medical Laboratory Sciences*, London, 1980, Aug., vol. 24, no. 8, pp. 350-352.

The history of budgeting in the National Health Service is outlined. Functional budgeting was introduced because: (i) the subjective method was inadequate both as a planning and as a budgetary control device; (ii) there was a growth of professionalism in many departments and a desire to become more visible; (iii) it accorded with accounting theory and philosophy; and (iv) it accorded with fashionable management theory. Two basic levels of budgeting have been identified: (i) comprehensive, the level at which the pathology division as a whole operates; and (ii) circumscribed, entailing the direct management of a service area, such as haematology or clinical chemistry. The four constituents of an operating budget are described: the statistical budget; the expenditure budget; the income budget; and the cash budget.

1408. CUNNINGHAM, Robert M. **Where have all the donors gone?** *Trustee*, Chicago, Ill., 1980, Feb., vol. 33, no. 2, pp. 19, 21, 22.

Despite increased expenses and more borrowing on the part of hospitals in the United States, organizers of fund-raising are optimistic that philanthropy will continue to flourish, with the satisfied patient as the main source of giving. However, hospitals need to guard against: (i) the belief that insurance schemes pay for hospital care for everyone; and (ii) the possibility that the government may offset gifts against Medicare and Medicaid payments. The number of hospital foundations concerned with fund-raising have increased rapidly in recent years and are often run by experienced executives. The basic appeal to help the sick poor is still viable, but the trend towards donations earmarked for specific purposes is likely to continue. The Coalition of National Voluntary Organizations and the National Council on Philanthropy have joined together to work for the protection of private giving for public purposes by seeing that charitable institutions are properly run and kept free from fraud. Hospital trustees should always make a thorough investigation of the credentials of any fund-raising organization.

COSTS

See also Abstract Nos. 1382, 1383, 1421, 1478, 1483, 1487

1409. PEARSON, David A. and ABERNETHY, David S. **A qualitative assessment of previous efforts to contain hospital costs.** *Journal of Health Politics, Policy and Law*, Durham, N.C., 1980, vol. 5, no. 1, pp. 120-141.

Proposals on hospital cost containment were introduced in the United States House of Representatives and Senate in April 1977, but the legislation has not yet been passed. This paper provides information which places current activities surrounding the debate on the proposals in historical perspective, and analyses previous major attempts to contain the rising cost of hospital care. These attempts are described in three general categories: (i) controls on reimbursement; (ii) controls on the supply of facilities; and (iii) controls on use. Events surrounding them reveal that any attempt to constrict the flow of resources to the health care industry will engender serious opposition. In addition, there are serious problems in defining health care needs and reasonable levels of reimbursement. These problems, coupled with society's general opposition to centralized planning and control, portend little success for centralized techniques in the foreseeable future.

1410. PRAISS, Israel and GJERDE, Craig. **Cost containment through medical education.** *Journal of the American Medical Association*, Chicago, Ill., 1980, July 4, vol. 244, no. 1, pp. 53-55.

Efforts for containing the costs of health care in the United States are currently being directed primarily to: (i) changes in the organization of health care provision; (ii) certification of need; (iii) peer review procedures; and (iv) changes in the cost-sharing and reimbursement modalities of third-party payers. An important area that to date has received insufficient attention is the process of medical education and the training of young physicians. A curriculum on the economic dimensions of medical practice is proposed. The principles of such a curriculum should be: (i) it should be a long-term educational process; (ii) teaching should start early in the medical student's education; (iii) it should include cost-conscious practice settings; (iv) evaluation procedures should be an integral part of curriculum development; and (v) a core group of interdisciplinary faculty members should share responsibility for developing the content, implementing, teaching and assessing the curriculum. Based on these principles, the outline of a curriculum is proposed which consists of both preclinical and clinical components.

1411. DAVIES, T. W. and COTTINGHAM, Joan. **The cost of hospital infection in orthopaedic patients.** *Journal of Infection*, London, 1979, Dec., vol. 1, no. 4, pp. 329-338.

A study was made of a cohort of 345 patients (188 men and 157 women) admitted to the care of orthopaedic surgeons at the Norfolk and Norwich Hospital for at least 48 hours from February to June 1978. Of these 29 became infected; they were mostly elderly women with urinary tract infection. These infected patients were matched with control patients from the same cohort. Those infected stayed in hospital for 41 days, compared with the control patients who stayed for 24 days, used more microbiological

services and antibiotics, and were a greater burden on the primary care services when they returned home. It was estimated that the cost of the extra hospital resources used was £775 per infected patient (1978 prices); all but two to three per cent of this was accounted for by the increased length of stay.

1412. **Cost containment in laboratories.** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, p. 20.

The operations of 15 laboratories in Ontario hospitals were reviewed by the Ontario Hospital Association and a number of cost saving proposals were implemented through the Association's Cost Effectiveness Program. The proposals made came in the areas of staffing, supplies, and systems of operation. Department managers should question the operation of their laboratories with regard to the ordering and carrying out of tests and the recording and reporting of test results.

1413. EVENS, Ronald G. **The economics of computed tomography: comparison with other health care costs.** *Radiology*, Easton, Pa., 1980, Aug., vol. 136, no. 2, pp. 509, 510.

It was predictable that computed tomography (CT) would generate controversy among physicians, patients, health care planners, politicians and political activists. It is expensive, an example of 'new technology', and was quickly accepted by clinicians prior to the publication of the results of studies of its efficacy. Much of the concern was economic. In reality, data from 130 CT installations for several years show that any increase in cost as a result of the installation and continued use of a CT unit in the diagnostic X-ray department is more than compensated for by the savings achieved by the concomitant reduction in other procedures, including exploratory surgery and angiography. Unless CT continues to be used in an increasing number of hospitals and clinical situations, the potential savings from CT will not be realized.

SUPPLIES AND STORES

PURCHASING

1414. HOUSLEY, Charles E. **Six alternatives in hospital buying.** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, pp. 37, 38.

It is important for the hospital purchasing director to be familiar with all the purchasing methods available to him. Shopping around for the cheapest buy of a 'single line' item is now out-dated, but can be used for a service. Group purchasing is increasingly popular and involves a director of hospital group purchasing buying in bulk for several hospitals. The 'prime supplier' concept is also popular and is the best method of buying medical and surgical supplies, but most purchasing directors do not use the system correctly. To benefit financially from 'prime supplier' buying, the purchaser must commit the hospital for nearly 100 per cent of one category of supply to a single vendor for a specified time. This system can also be used corporately with other hospitals. Consignment purchasing means a supplier does not charge for items supplied until they have been used. This has some advantages, but uses hospital storage

space and may be expensive in the long run. Negotiating for supply contracts is advantageous for hospitals of all sizes. The modern purchasing director may need to use a combination of these systems to find the elusive 'best price'.

ECONOMIC USE OF SUPPLIES, DISPOSABLES

1415. **Single-use devices should not be reused.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 157, 158, 160.

Single-use medical devices have provided many advantages, such as better infection contro!, ready availability, and specific cost savings per unit of use. In today's cost containment environment, however, some individuals and hospitals have been re-using them in an effort to increase cost savings. This alteration of use has begun to pose a problem for patients, administrators, and manufacturers. This paper discusses the legal, medical and cost implications of re-use, with particular reference to dialysers. At the heart of the re-use controversy is the basic issue of quality versus cost. Studies are required to determine whether the practice of re-using dialysers has any adverse medical effects and whether the policy of re-using single-use dialysers to achieve a reduction of overall costs is worth these effects.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

1416. EEROLA, Marja-Riitta. Kanta-Hämeen keskussairaalan keskuskeittiön esittely. **[The catering department of Kanta-Häme Central Hospital.]** *Sairaala*, Helsinki, 1980, no. 4, pp. 170, 171.

The Central Hospital district of Kanta-Häme serves a population of some 145,000. The present central kitchen was built in 1975, when there were 170,000 patient days; there are currently 375 patients, and by 1984 there will be about 465. Catering is based on rotating menus and the central kitchen works on the system of 'self-made' food. Light basic food can be used for diets, where the caterers know what raw materials have been used. The pre-treatment of several products is done by the catering industry, e.g., bread is sliced, potatoes are peeled, and meat is sliced or cut in the factories. The labels and contents of diets are made uniform between wards and kitchens. Catering is simplified by both staff and patients' lunches being basically the same. Distribution of meals is centralized: meals are transported to the wards by two trolleys at a time, and the patients receive them within 15 to 20 minutes. Extra snacks for some patients come to the ward at the same time and are served by ward staff later on. The staff canteen has self-service. The kindergarten gets its meals separately, and the meals sold out of the hospital are also sent out separately. Though the basic food is light, preparation of diets plays an important role in the central kitchen; the kitchen also gives dietary advice to patients. The area of the kitchen is 1,000 sq m; the dining room is 306 sq m, and the staff dining room seats 200. The kitchen area is divided into pre-treatment, cooking, frying, cold food and diet sections, with a separate washing up room. The diet section has its own utensils, refrgerator and microwave oven. Surfaces are covered with stainless steel, and although some sections of the kitchens are rather far from each other, by and large it is considered to function satisfactorily.

DIETETICS IN THE HOSPITAL

1417. HATTNER, Jo Ann and WOOD, Pat. **Assuring quality nutritional care in an acute-care setting.** *Journal of the American Dietetic Association*, Chicago, Ill., 1980, Aug., vol. 77, no. 2, pp. 165-167.

A five-step process has been developed for the provision of nutritional care for the patients of the 668-bed Stanford (Calif.) University Medical Center. The system is co-ordinated by the professional standards review committee, which consists of two permanent and two rotating members, representing clinical and administrative dietetics. The committee reviews and finalizes material developed by individual staff dietitians. The five steps are: (i) writing standards of nutritional care; (ii) selection of method of recording nutritional care information in the medical record; (iii) development of nutritional care guidelines; (iv) using an algorithm of nutritional care; and (v) development of an on-going audit process. The algorithm used is reproduced.

1418. HUTCHINSON, Judith. **Are your skills as a hospital nutrition expert wasted?** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, pp. 26, 27.

Many hospital dietitians feel they are not fulfilling their role of providing nutritional care for their patients. They should provide such care by: (i) collecting relevant data by which to evaluate the patient's nutritional status; and (ii) developing and implementing a suitable dietary treatment plan in consultation with the patient. The dietary plan should be recorded in the patient's medical notes and any proposed changes discussed with the patient. The dietitian must take an active part in the treatment team. Some administrators have a limited view of the dietitian's nutritional skills and some physicians are reluctant to allow nutritional consultation. However, whatever the problems, the dietitians themselves must be responsible for increasing the effectiveness of their role.

FOOD SERVICE

See also Abstract Nos. 1367, 1385

1419. YUNG, Louise S. and others. **Productivity in food service systems in fourteen nursing homes.** *Journal of the American Dietetic Association*, Chicago, Ill., 1980, Aug., vol. 77, no. 2, pp. 159-164.

A study of the productivity of catering staff in 14 nursing homes in Wisconsin was conducted using activity sampling. The nursing homes shared the following characteristics: non-governmental; bed capacity between 81 and 120; occupancy of 80 per cent or above; skilled nursing facility; and centralized catering system. Staff minutes per meal equivalent for three days of study in each home ranged from 7.13 to 18.95; the mean was 11.25 minutes, with a standard deviation of 2.94. Significant differences were found in total minutes per meal equivalent and in minutes per meal equivalent for the three major work categories (direct work, indirect work and delay time) among the catering systems, but not among the days of study in each nursing home. Four homes were significantly different from the other 10 in direct work activities. Mean percentages of time for the six direct work activities in the 10 homes were: cleaning, 22.12; service, 16.96; processing, 15.50; transport, 13.96; clerical, 3.26; and receiving, 0.82. The

findings could be used as guidelines for nursing homes with similar characteristics, though they may not imply the optimal level of quantitative productivity for achieving quality catering and an adequate level of nutritional care.

1420. ROSE, James C. **Containing the labor costs of food service.** *Hospitals*, Chicago, Ill., 1980, March 16, vol. 54, no. 6, pp. 93, 94, 96, 98.

Staff costs are the single most significant expense in a hospital's catering budget. They are generally divided into two major categories: (i) direct costs—related to hours of productive activity; and (ii) indirect costs—related to expenses incurred for which no productive activity has occurred. The latter may be further divided as: measurable (vacation, sick leave, etc.); and rarely measured (training, turnover, unproductive practices, gratis meals). Often it is in the second category of costs that dramatic savings may be realized. Methods of controlling staff costs include: accurate estimation of staff needs; productivity measurement; introduction of job standards; substitution of equipment for staff; methods improvement; elimination of unproductive practices; improvements in supervision, compensation and personnel practices; and management commitment to cost saving.

1421. MCLAREN, Alan. **Containing the costs of food service.** *Hospitals*, Chicago, Ill., 1980, March 16, vol. 54, no. 6, pp. 75-77.

The three major costs in hospital food service administration are labour, food and related supplies, and energy. Prudent buying of food, the maintenance of a minimal stock level and accurate issuing of ingredients all produce cost containment in the area of food supplies. The use of management methods, such as performance evaluation and review technique (PERT), can be applied to hospital dietary departments to improve efficiency. Automatic tray assembly and distribution systems have been introduced in some hospitals to increase productivity and contain costs. Energy can be saved by: (i) switching off equipment not in use; (ii) using dishwashers only with a full load; and (iii) choosing equipment which includes energy saving features in its design. An effective maintenance and cleaning system can extend the life of equipment and improve its energy efficiency. The Community Hospital of Indianapolis has a well established management programme for both staff and supplies in its dietary department. It is expected that a new mini-computer in the department will reduce food costs by three to five per cent.

1422. ARENS, Willy. Fallstudie: Umstellung auf neues Speiseverteilungssystem in Kreiskrankenhaus Norden. **[Case study: changeover to a new method of distributing meals in Norden District Hospital.]** *Krankenhaus*, Stuttgart, 1980, Aug., vol. 72, no. 8, pp. 289-295.

This is a detailed account of the introduction of a Vari-Serv meal distribution system in the 379-bed Norden District Hospital. The patients select their menus the evening before and their order cards are sorted automatically when they reach the kitchen. Fresh, frozen and convenience foods are used. Everything except the meat dishes can be prepared in advance, thus ensuring an even flow of work for the kitchen staff. The tray with the patient's order card attached to it is placed on a conveyor belt in the kitchen and the individual dishes are added one by one. The trays are then taken to the wards on Gastro-Norm tray-trolleys which each hold 36 trays. This account includes a

timetable for work in the kitchen, which is open from 0600 to 0800 and where 10 to 12 people are employed on each shift. There is also a list of the main items of kitchen equipment and three photographs.

HYGIENE IN THE HOSPITAL KITCHEN

1423. BLACK, Nicholas. **Recipe for cleaner kitchens.** *Health and Social Service Journal*, Basingstoke, 1980, Aug. 8, vol. 90, no. 4705, pp. 1036-1038.

In the last 18 months, two food hygiene surveys have been carried out in facilities of the Oxfordshire Area Health Authority. (i) in a community hospital following two small outbreaks of food poisoning despite a modern kitchen and high quality catering staff; and (ii) in a psychiatric hospital, a much older establishment with a history of food poisoning. Following initial discussions with all concerned and preliminary observations, close observations were made by local authority environmental health officers, during two separate 24-hour periods, of all catering activity. Bacteriological sampling was carried out on food, equipment and the building itself. Both studies made recommendations (13 from the community hospital and 40 from the psychiatric hospital) of ways of improving food handling. These suggestions fell into five main categories: management; kitchen equipment; organization of food preparation; organization of cleaning; and training. The value of the surveys and the possible forms of future surveys are discussed.

WASHING UP, CLEANING OF EQUIPMENT

1424. HAUTALA, Helena. Astianpesu sairaalan suurkeittiössä. **[Bulk washing up in a hospital catering department.]** *Sairaala*, Helsinki, 1980, no. 4, pp. 180, 181.

The size of a hospital washing up department depends on the number of beds. For 50 patients the department must have an area of 15 sq m, 50 sq m for 200 beds and 60 sq m for 500 beds. The space for washing trolleys (in the washing up room or in connection with it) must be 10 sq m, 30 sq m or 50 sq m respectively. In large hospitals there may be a separate washing up department for staff. The two types of dishwashers are the basket machines, with one or several tanks, and peg mat machines. In the former, dishes are put in the dishwasher in baskets, both washing up and rinsing taking place in the basket. The capacity of one-tank dishwashers is 40 to 60 baskets an hour; dishwashers with several tanks can manage 100 to 400 baskets an hour, depending on the programme. The bigger dishwashers are used in hospitals with 100 beds or more. In peg mat machines only cutlery and small plates are put in baskets; all other dishes are placed on the peg transporter mats; such dishwashers suit hospitals of 400 beds or more. The temperature of the pre-rinse water is 35°C, with 65°C for the main wash; rinsing is at 75° and the final rinse at 85° for 10 to 15 seconds, making an additional heater necessary. Dishwashers are electric, but can be fed by steam where convenient. The correct capacity dishwasher is very important, and the water pressure required has to suit the hospital mains supply. The noise made should not exceed 85 decibels, and the temperature in the room should be below 25°C, with a relative humidity under 70 per cent. Costs can be reduced by using low temperature active washing powders. The cost of washing up comprises capital cost (15 per cent), energy and washing powder (15 per cent) and wages (50 to 70 per cent).

LAUNDRIES AND LINEN SERVICE

See Abstract No. 1442

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

See also Abstract Nos. 1411, 1468

1425. ABEYSUNDERE, Rohini L. and others. **Bacteraemia in the Royal Free Hospital 1972-76.** *Journal of Infection*, London, 1979, June, vol. 1, no. 2, pp. 127-138.

A retrospective study was made of the records of the Royal Free Hospital, London, from 1972 to 1976. A total of 549 episodes of bacteraemia (excluding those from the infectious disease hospital) were diagnosed in the microbiology department; the records of only 273 of the patients were available for analysis. These are discussed in relation to laboratory methods and are analyzed with regard to the patients' underlying clinical conditions and the efficacy of antibiotic treatment. Such analysis is useful in indicating the adequacy of laboratory methods, and is essential if predisposing factors are to be recognized and, where possible, ameliorated. This is of increasing importance with the growing number of patients with impaired defence mechanisms and the increasing sophistication of therapeutic and diagnostic measures.

1426. ANYIWO, C. E. and others. **Nosocomial infections—a continuing danger to patients at Lagos University Teaching Hospital.** *Public Health*, London, 1980, July, vol. 94, no. 4, pp. 229-234.

Between 1977 and 1978, there were 693 hospital infections in the Lagos University Teaching Hospital. The incidence dropped over this period. The lower incidence was mainly due to intensive infection control measures and the awareness engendered by the current surveillance programme. Surgical wound (58.7 per cent) and urinary tract (22 per cent) still constitute the most frequent affected sites, with a preponderance of Gram negative to Gram positive organisms in the ratio of 5:1. It is concluded that hospital-acquired infection at the hospital is a continuing danger and should be met by appropriate preventive measures through a multidisciplinary approach.

1427. HOLZEL, H. and others. **An outbreak of rotavirus infection among adults in a cardiology ward.** *Journal of Infection*, London, 1980, March, vol. 2, no. 1, pp. 33-37.

During a two-week period in January 1979, 11 patients and four members of the staff of an adult cardiology ward developed diarrhoea. Rotavirus excretion was demonstrated in five of the 11 cases available for investigation. The ward was divided into five bays and six isolation cubicles. The full epidemiology of the outbreak is not yet apparent. Clustering of cases among ambulant patients may indicate that, in addition to the faecal route, transmission of rotavirus in adults may be a result of close contact. The use of appropriate isolation measures appeared to bring the outbreak to an end; these measures seem to be of particular importance in the management of adult infection in hospital, as excretion of virus after cessation of symptoms may be prolonged.

SOURCES OF INFECTION

See also Abstract No. 1369

1428. IRWIN, Richard S. and others. **An outbreak of acinetobacter infection associated with the use of a ventilator spirometer.** *Respiratory Care*, Dallas, Tex., 1980, Feb., vol. 25, no. 2, pp. 232-237.

In the late spring of 1976 an increase in blood culture isolates of *Acinetobacter calcoaceticus* variety anitratus was noted at Rhode Island Hospital, Providence. A six-month retrospective review of cultural surveillance data revealed that *Acinetobacter* had been cultured from 51 sites in 45 patients. In both the 17 infected and the 28 colonized patients, the respiratory tract was the most common site involved. Furthermore, all patients had been on the medical and surgical intensive care units at some time. Prospective surveillance of intensive care environment, staff and patients established that Bennett MA-1 spirometers constituted the major reservoir of infecting organisms. Despite daily sterilization, 30 per cent of spirometers in use were found to be contaminated. The hands of 12 per cent of intensive care nurses and 10 per cent of respiratory therapists cultured were found to be contaminated. Following discontinuation of spirometer use and increased emphasis on proper handwashing, the incidence of *Acinetobacter* infections dropped dramatically.

PREVENTION AND CONTROL

1429. **The SENIC project.** *American Journal of Epidemiology*, Baltimore, Md., 1980, May, vol. 111, no. 5 (whole issue).

The Study on the Efficacy of Nosocomial Infection Control (the SENIC project) was born in 1974, out of the uncertainty, concern and frustration felt by infection control workers, who wondered if, after all, all the things they were doing and saying made any difference. The project, planned and directed by the Center for Disease Control, has three primary objectives: (i) to determine whether (and, if so, to what degree) the implementation of infection surveillance and control programmes (ISCPs) has lowered the rate of hospital infection; (ii) to describe the current status of ISCPs and infection rates; and (iii) to demonstrate the relationships among characteristics of hospitals and patients, components of ISCPs, and changes in the infection rate. The papers in this special issue are particularly concerned with the design and methodology of the project, but there are also papers on the emergence of ISCPs in US hospitals, and the infection control nurse in US hospitals.

STERILIZATION

See also Abstract No. 1490

1430. HURRELL, D. J. **Low temperature steam disinfection and low temperature steam/formaldehyde sterilization.** *Sterile World*, Sutton-in-Ashfield, 1980, Aug., vol. 2, no. 4, pp. 13-18.

The established method of choice for sterilization is high pressure steam, but many products of medical significance will not withstand the process either because the component materials are degraded or because in their fabricated form they will not

accommodate, for example, the differential thermal expansion of the component materials. Thus there is an established need for a low temperature process to provide the required level of microbial inactivation. The development of the low temperature steam and formaldehyde (LTSF) sterilization process is described, together with the design requirements for LTSF machines and the microbial effects of the process. Whatever the difficulties and uncertainties of the LTSF process, modern machines have repeatedly demonstrated performances equivalent in many instances to steam at 115°C for 30 minutes. The role of low temperature steam without the addition of formaldehyde as a high grade disinfection process is also significant and it is to be expected that this technique will achieve almost universal acceptance.

1431. DEVERILL, C. E. A. and CRIPPS, N. F. **Safe working conditions for formaldehyde disinfectors and sterilizers.** *Sterile World*, Sutton-in-Ashfield, 1980, June, vol. 2, no. 3, pp. 13-15.

Low temperature steam/formaldehyde autoclaves with an automatic cycle and formaldehyde gas cabinets for the decontamination of medical equipment cause a large number of health service staff to be exposed to a relatively high concentration of formaldehyde vapour, usually without ill effect. However, formaldehyde is toxic and an irritant, and eye-shields should be used by staff transferring formaldehyde from bulk containers to machines. The concentration of formaldehyde used in autoclaves should be low and the recommended maximum threshold value in a working area is two parts/10_6 of formaldehyde. Ventilation and purging must be adequate when formaldehyde disinfectors are used for medical equipment. An extract fan is valuable in reducing formaldehyde vapour if an accidental discharge occurs and maintenance instructions for autoclaves must include procedures for dealing with a defective machine. A weekly cycle using water in the autoclave reservoir should be used to flush out the pipework. Personal protective equipment is an additional safeguard. Low temperature autoclaves properly installed and maintained are unlikely to be a health risk.

AIR HYGIENE

See Abstract Nos. 1460, 1461, 1485

SAFETY MEASURES

ACCIDENTS, GENERALLY

See Abstract Nos. 1434, 1443, 1460, 1461

FIRES AND FIRE PREVENTION

1432. CENTRE NATIONAL DE PRÉVENTION ET DE PROTECTION. **Fire safety in hospitals and nursing homes: a report of an important international three-day conference in Paris, organized by the Centre National de Prévention et de Protection (CNPP—the French FPA) and sponsored by CFPA Europe with the collaboration of the International Hospitals Federation and the International Federation of Hospital Engineers.** London, Fire Protection Association, [1978]. 58pp. £5.00

The conference reports are presented in seven sections: (i) the problems, with

papers on hospital and nursing home fires in the United Kingdom and the analysis of fire risk; (ii) viewpoints, considering the role of the hospital director, nurse, architect, designer and the fire brigade; (iii) aspects of legislation, with papers on the law in the United Kingdom, bureaucracy, the role of economists and lawyers, fire safety regulations in France and hospital fire protection in New Zealand; (iv) construction and design, including defining a strategy and the use of compartments, risk evaluation, structural and design factors and effects of furniture and fittings; (v) protection, with papers on fire detection and extinguishing equipment and hospital evacuation; (vi) the human factor, discussing the importance for hospital staff of awareness of fire danger, training, organization, co-operation with the fire services and observation of regulations; and (vii) costs, with papers on balancing the costs of protection, cost of safety in French hospitals, risk management and the need for automatic fire protection.

RADIATION HAZARDS

1433. LANGMEAD, Walter A., editor. **Radiation protection of the patient: a manual of good practice. 1. Diagnostic radiology.** London, British Institute of Radiology for British Radiological Protection Association, [1980]. xiii, 61pp. ISBN 0 905749 06 5 £2.95

Acceptable levels of risk arising from exposure to radiation can be judged only by comparison with other everyday hazards which are considered acceptable to the general public. Although members of the public are covered by the 'Ionising radiations regulations' in Britain, there is no provision for patients who are receiving radiation for the purpose of medical diagnosis or treatment. Since almost 90 per cent of genetically significant radiation is from medical sources unnecessary irradiation must be avoided. The responsibilities of those concerned with radiation treatment are set out (doctor, radiologist, radiation protection supervisor) and the technical factors are also described. Notes on certain types of examinations are given and there is guidance on establishing departmental policy on procedures.

1434. SPRI. Röntgenstrålskydd: blygummi m m för patient- och personalskydd. **[Radiation protection: lead rubber shielding protection for patients and staff.]** Stockholm, Spri, 1980. 28pp. (Råd 6.23)

Three types of lead-rubber shielding for use in diagnostic X-ray departments are evaluated and some recommendations are made as to care, storage and cleaning. The main application of lead-rubber is for aprons worn by X-ray staff, their chief problems being associated with the attachment of buttons and buckles. The efficacy of the shielding is discussed and some limitations are indicated. A summarized safety check-list for display in the work-area is also described in this study.

THE PATIENT

1435. MAGNUSSON, Gudjon and AURELIUS, Göran. **Illness behaviour and nationality: a study of hospital care utilization by immigrants and natives in a Stockholm district.** *Social Science and Medicine*, Oxford, 1980, July, vol. 14A, no. 4, pp. 357-362.

Immigrants in Sweden have the same rights as natives in the national social insurance

system and legally have equal access to medical care. There are, however, a number of reasons why immigrants may exhibit different illness behaviour compared with the native population. In a record linkage study, hospital use during a 15-month period (January 1976 to March 1977) by Swedes and two groups of immigrants, Finns and Mediterraneans, was compared. The study population (17,004 people) was a 10 per cent sample of the population in a Stockholm district. Compared with Swedes, immigrants used emergency departments more often, but out-patient clinics less often. Immigrants received more fragmented and episodic care which may lead to more emergency visits. The illness behaviour was more similar for Swedes and Finns than for Swedes and Mediterraneans. The highest rate of hospital use was among Mediterranean women; 20 per cent of their hospital admissions were diagnosed as symptoms and ill-defined causes. Some of the differences found in the study may be explained by institutional barriers that guard out-patient clinics and to a certain extent health centres and private physicians and make these institutions less accessible to immigrants than to natives.

WELFARE OF THE PATIENT

See also 1458, 1475, 1476, 1500

1436. NUFFIELD PROVINCIAL HOSPITALS TRUST. **Talking with patients: a teaching approach; observations of a Nuffield working party on communications with patients.** (Chairman: Professor Sir John Walton). London, Nuffield Provincial Hospitals Trust, [1980]. 55pp. bibliog. ISBN 0 900574 32 1 £0.50

This booklet gives a brief account of the evidence relating to failure in the process of consultation, and details the errors which many students and also doctors make in the interview, and particularly in the exposition. It describes new teaching methods which have been found to help students, and doctors during vocational training, to become better at communication. An interviewing model is presented in an appendix. A list of 66 references to the literature, with annotations, is included.

1437. HOGAN, Norma Shaw. **Humanising health care: task of the patient representative.** Oradell, N.J., Medical Economics Company, 1980. xiv, 190pp. ISBN 0 87489 200 7 £9.40

Patient representatives are responsible for ensuring that patients are well treated and their rights respected. This responsibility is considered from all aspects, from operating room to accounting department. The author sees it as a full-time role for patient representatives, rather than being part of an administrator's job. In the United States medical malpractice is a common issue and patient representatives are one way of establishing a proper patient grievance mechanism.

1438. RAMON, Shulamit. **Attitudes of doctors and nurses to self-poisoning patients.** *Social Science and Medicine*, Oxford, 1980, July, vol. 14A, no. 4, pp. 317-324.

Three projects to investigate different facets of physicians', nurses' and psychiatrists' attitudes to self-poisoning patients are reported: (i) a comparison of attitudes in two general hospitals in the United Kingdom; (ii) a comparison of attitudes in two psychiatric hospitals in two cultures (Britain and Israel); and (iii) a study of the ways in which actual patients are approached in comparison to hypothetical ones. Although the findings need repetition and rechecking in additional settings and in larger samples in

order to validate the conclusions, the author emphasizes the following main conclusions as guidelines for further study: (i) professional consciousness and structural position overshadow the impact of any other component (i.e. culture, gender) in regard to attitudes towards self-poisoning patients; and (ii) the ambiguities faced by the professionals reflect the existing societal contradictory approach in regard to self-poisoning. The difficulties inherent in holding an ambiguous attitude are resolved to an extent by adopting a stereotyped stand. Despite the ambiguity the respondents showed little hesitation in attributing labels to hypothetical or real patients.

1439. **Advertisements get an airing.** *Health and Social Service Journal*, Basingstoke, 1980, Aug. 15, vol. 90, no. 4706, pp. 1069, 1070.

Hospital radio, run by volunteers and providing entertainment for patients, is now well established in Great Britain. A recent Department of Health and Social Security circular (HN(80)12) was concerned with advertising on hospital radio. It gave details of special licensing requirements and specified certain restrictions. The pioneer and, to date, only hospital radio system broadcasting advertisements is London Hospitals Broadcasting, based at Whittington Hospital. It now has three studios, 67 staff, and broadcasts for 15 hours a day to the Whittington and other hospitals in North London. It was in 1975 that the chairman and station controller saw the need for advertising to provide the necessary income to expand and improve the service. But it was not until 4 December 1978 that an experimental one year licence was granted. The introduction of advertising required stricter programme control. Although the project did not justify the investment in financial terms, it proved that commercialization of hospital radio could work, that it could produce additional revenue for a charity of this type, and that volunteer workers could successfully administer such a large project.

1440. CARPENTER, Douglas C. **Hospitals should be fitness centers.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 148, 150, 152, 154.

Hospitals now have a great opportunity to initiate an innovative programme in meeting the demand for services at the opposite end of the health care spectrum—the promotion of health and fitness in addition to the provision of acute services. Examples of such provision by industrial companies for their staffs are cited. A possible model for greater involvement of hospitals in health promotion is the health promotion and fitness centre. The centre could have three major operational divisions: fitness counselling services; fitness activities; and fitness research. The centre's activities should extend outside the hospital. A number of questions regarding the administration and management of such centres will have to be answered.

1441. MORROW, Gary R. **How readable are subject consent forms?** *Journal of the American Medical Association*, Chicago, Ill., 1980, July 4, vol. 244, no. 1, pp. 56-58.

A consent to treatment form provides required information that a patient may use to give intelligent, informed consent to proposed treatment. A study of the degree to which the informed consent document is readable and understandable by patients is reported. Five national cancer clinical trial groups submitted 60 informed consent forms for the study. Two standard techniques were applied to them: the Flesch readability formula; and the Fry readability scale. The forms were found slightly less

difficult to comprehend than medical journals but substantially more difficult than comparable materials from the popular press. Three of four passages describing treatment methods, procedures, discomforts, and risks required a college level or greater reading ability to comprehend. The results suggest that informed consent documents may not be understood by a substantial portion of patients who sign them. The very regulations designed to ensure a patient's informed co-operation with treatment may inadvertently lead to forms that are so complex as to make informed co-operation virtually impossible.

1442. HINCHLIFFE, D. J. **A patients' personalised clothing service.** Manchester, University of Manchester, Department of Social Administration, Health Service Management Unit, 1980. [iii], 24pp. (Working Paper No. 27) £2.00

One of the many ways to improve the living conditions of long-stay hospital patients has been the personalized clothing service. Official circulars on psychiatric hospitals state that: 'all patients should be encouraged to purchase and wear their own clothes. Those who are unable to buy their own clothing should have a full range of clothes provided by the hospital'. Similar guidance is provided for geriatric hospitals and a circular on laundry organization stresses the need for facilities to allow 'laundering of personal clothing'. This report describes the services provided by Bolton Area Health Authority—special staff are employed, a wide range of clothing is provided, and special dry cleaning and repair sections are available.

HOSPITAL SOCIAL WORK

See also Abstract Nos. 1437, 1476

1443. NACMAN, Martin. **Social worker can eliminate potential risks.** *Hospitals*, Chicago, Ill., 1980, June 16, vol. 54, no. 12, pp. 189, 190, 192.

Risk management essentially involves programmes designed to decrease risk to the patient, to increase the safety of the hospital, and to improve consumer satisfaction. But programmes that reduce physical risk are not enough. Two important factors that contribute to the increased number of malpractice cases are erosion of the physician-patient relationship and unrealistic expectations as to the outcome of treatment. Staff education can do much to reduce the patient's negative reactions toward hospital and staff, but intervention also requires professionally trained staff capable of analyzing the coping patterns of patients and families plus developing and maintaining a therapeutic relationship with patient and family. Tasks which the social worker can perform to contribute to a risk prevention programme are listed, together with reasons why the social worker can serve effectively as an advocate. Two case studies illustrate the preventive potential of the trained social worker.

THE GENERAL PRACTITIONER AND HIS PATIENTS

See also Abstract No. 1494

1444. LUKE, Roice D. and THOMSON, Michael A. **Utilization of within-hospital services: a study of the effects of two forms of group practice.** *Medical Care*, Philadelphia, Pa., 1980, Feb., vol. 18, no. 2, pp. 219-227.

Three categories of physicians admit patients to a 550-bed acute general hospital in

Denver, Colo.: (i) those in a major prepaid group practice (PPG); (ii) those in a major fee-for-service group practice (FFS); and (iii) unaffiliated physicians (UA). This study examined the effect of group affiliation on the use of technical and clinical resources by physicians. Patient data were adjusted whenever possible for patient diagnosis and severity. In comparison with other physicians, the PPG physicians used somewhat fewer technical resources, though the difference was not statistically significant. Differences in the use of clinical resources were statistically significant, with the FFS physicians using consulting services most and the PPG physicians using them the least. The results indicate that: (i) FFS group structures may reinforce the incentives to share in consultation revenues; (ii) PPG physicians may experience difficulty in becoming integrated into the informal structures of physician practice patterns; and (iii) the control of the groups over the use of technical hospital resources may be substantially weakened when groups do not own or control the hospitals to which they admit their patients.

TRANSPORT OF PATIENTS

1445. CETTOUR-BARON, G. Les transports sanitaires. **[The ambulance service.]** *Revue Hospitalière de France*, Paris, 1980, May, vol. 44, no. 331, pp. 731-738.

The French Social Security Office is now refusing to reimburse hospital or fire brigade ambulance services for taking patients between their homes and hospitals other than the hospital which provides the ambulance service. Likewise, they will not pay for journeys between patients' homes and private clinics, although privately operated ambulance services continue to be paid for this type of journey. The public hospitals, naturally, consider that this is unfair. The author examines the relevant legislation in detail and describes proposals which would resolve the problem to the satisfaction of the public hospitals and fire services.

HOSPITAL CARE

See also Abstract Nos. 1380, 1462, 1478

1446. BRAISSANT, Claudine. Etre hospitalisé aujourd'hui, demain . . . **[Hospital care today, tomorrow . . .]** *Schweizer Spital*, Aarau, 1980, vol. 44, no. 3, pp. 16-18, 21, 22.

The author examines three questions: (i) what kind of patient do we find in hospital today?; (ii) what do they hope for?; and (iii) what can, or could the hospital offer them? Patients are older, more dependent, and more seriously ill than before; very few are completely cured when they leave and their anxiety about their future is obvious. Normally they want to be treated as individuals and want their care to be explained to them. They want to be considered as partners in their care, have their behaviour as a sick person accepted as part of their illness, and they want to be treated with kindness and firmness. The patient must be placed at the centre of everyone's concerns; systems centred on the patient's problems should be encouraged. The patient should systematically be given information about his treatment, and programmes of instruction for him and his family ought to be developed. Extra-hospital services could be developed and extended, so that the patient could be cared for in his own home. The author illustrates her discussion with a wealth of concrete detail.

1447. GRIFFIN, Caryl. **Primary nursing: trend or tradition?** *Southern Hospitals*, Greenville, S.C., 1980, May/June, vol. 48, no. 3, pp. 24-26.

At University Hospital, Augusta, Ga., each patient is assigned to a day, evening or rotating full-time registered nurse who is his primary nurse. Associate nurses, who may be registered, graduate or licensed practical nurses, care for the patient when the primary nurse is off duty. Implementation of this mode of nursing included: preparation of role guidelines; in-service training; problem-solving by individual units to find their most effective method of operation; and workshops for senior nursing staff. Problems have included: reactions of non-pilot units; lack of inter-unit and unit-to-administration communication; and balancing the case load of primary nurses. Five units have begun implementing primary nursing and the next six months will be spent evaluating the impact of the project. Some early effects of the system are mentioned, with emphasis on the extra burden of responsibility it places on the nurse.

1448. GREGG, Thomas E. and HAHN, Jack A. L. **Demystifying quality assurance.** *Trustee*, Chicago, Ill., 1980, Feb., vol. 33, no. 2, pp. 16-18.

Most trustees are concerned about their ability to understand and monitor their hospital's quality assurance procedures. Methods of increasing their understanding range from making trustees voting members of medical audit committees to distributing audit committee reports during board meetings for perfunctory approval. A simple, middle way is for a trustee to be appointed for a specific period to observe the monthly meetings of the medical audit committee of the medical staff. This limited participation method offers four advantages: convenience; lack of pressure; educational opportunities; and transferability. Since 1978, trustees at Methodist Hospital of Indiana, Indianapolis, have been observing, on a three-month rotating basis, the monthly meetings of the medical audit and utilization review committees. Attendance at the meetings has not only increased trustees' understanding, but enables them to make constructive suggestions for improvement in quality assurance.

1449. RENÉ, Louis. Évaluation de la qualité des soins. **[Evaluation of quality of care.]** *Hospitalisation Privée*, Paris, 1980, June/July, no. 204, pp. 9, 12-14.

The chairman of the Paris Doctors' Association discusses his attitudes to the evaluation of quality of medical care. He describes the main steps in an internal audit and discusses the problems of achieving a consensus among doctors as to what constitutes care of high quality. He believes that doctors must play a leading role in any internal audit; the assessment cannot be left to the administrators. On the other hand, the quality of the administrative services in a hospital should also be evaluated. Finally, the public needs to be educated so that they can understand what medicine can and cannot achieve.

1450. SEGALL, Alexander and BURNETT, Margaret. **Patient evaluation of physician role performance.** *Social Science and Medicine*, Oxford, 1980, July, vol. 14A, no. 4, pp. 269-278.

A study of the criteria by which patients evaluate their physicians was undertaken in the family medical centre affiliated with a major teaching hospital in Winnipeg. A mailed questionnaire was sent to 500 randomly selected patients; 231 usable replies

were received. The questionnaire contained a physician conformity index and measures of patient satisfaction and perception of physician technical competence. A correlational analysis of the data disclosed that the principal relationship appears to be between perceived physician affective conformity and general patient satisfaction. The findings indicate that perceived physician conformity to patients' affective expectations is considerably more important in determining the patients' evaluation of physicians' role performance than perceived conformity to either procedural or administrative expectations. The paper concludes with discussion of the various factors which may explain why this dimension of the physician-patient relationship plays such a major part in shaping patients' expectations and evaluation of perceived physician behaviour.

1451. REID, M. E. and MCILWAINE, G. M. **Consumer opinion of a hospital antenatal clinic.** *Social Science and Medicine*, Oxford, 1980, July, vol. 14A, no. 4, pp. 363-368.

The obstetricians at a large Glasgow hospital felt that routine antenatal care provided by the hospital did not meet the needs of all women, even though the care was medically and obstetrically quite adequate. It was suggested therefore that a clinic, run by hospital staff, should be set up in one of the housing schemes in the eastern district of Glasgow. Prior to setting up the clinic, a study of user opinion was conducted at a small city antenatal clinic, using an interview schedule with open-ended and closed questions. Of the random sample of 91 women who were approached, 96 per cent co-operated. From the results, three topics are singled out for discussion: practical arrangements for clinic attendance; doctor-patient consultation; and antenatal classes. Three recommendations are made: (i) a peripheral clinic would undoubtedly help reduce the present difficulties mothers experience with each clinic visit; (ii) the obstetrician should share his understanding of the baby's progress with the mother, giving particular attention to those who have had previous complications; and (iii) the relevance of information provided at antenatal classes and its mode of presentation should be reviewed, realism rather than idealism being sought.

TERMINAL CARE

See also Abstract No. 1363

1452. DONOVAN, Helen. **The hospice movement: a unifying force?** *Nursing Forum*, Park Ridge, N.J., 1980, vol. 19, no. 1, pp. 19-25.

The hospice movement may have implications for nursing that extend far beyond the scope of terminal care. When the principles of hospice are followed consistently, they can help create new dimensions of professional sensitivity and skill for total nursing care. These principles are: (i) 'to be present for one another'; (ii) practical help; (iii) attentive awareness; and (iv) appreciation of the individual. If the hospice way could be extended to nursing elsewhere, it would help to transcend the cleavages found everywhere in the profession, thereby uniting nurses around a common good.

1453. VALENTOUR, Louis F. **Hospice design keyed to program goals.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 140, 142, 143.

An informal residential setting is the aim of the design of the first hospice for the State of Pennsylvania initiated by the Forbes Health System. The site selected for the

hospice was one of the hospitals in the Forbes Health System undergoing renovation. The eight single patient rooms are on either side of an extra wide corridor which has been furnished as a lounge area. Other facilities include large lobby, small dining/recreation area, kitchen, conference/office rooms, and bath and shower room. The floors are completely carpeted, and the walls are painted in attractive, harmonious colours. A plan of the hospice and two coloured photographs of its interior are included.

1454. MILNER, Clara Joan. **Compassionate care for the dying person.** *Health and Social Work*, Albany, N.Y., 1980, May, vol. 5, no. 2, pp. 5-10.

There is increasing public concern about the care of dying patients. The hospital continues to view itself exclusively as a life-saving institution. There can be no substantial improvement in the care of the dying patient until health care professionals (social workers, nurses and physicians) view the provision of compassionate care as one of their primary roles. Compassion is defined as conveying a sympathetic consciousness of others' distress, coupled with a desire to alleviate it. This paper explores ways in which these professionals can resolve their own fears about dying and then begin to help the patient achieve a 'good death'.

1455. MEYER, Katherine A. **The hospice concept integrated with existing community health care.** *Nursing Administration Quarterly*, Germantown, Md., 1980, vol. 4, no. 3, pp. 49-54.

Interest in establishing hospice programmes as supplementary hospital functions has been growing in the United States. Hospice is a philosophy of care and is not therefore dependent on the availability of a particular kind of facility for implementation. A hospice programme that combines the resources of an existing home health agency may be the model best able to use available resources and therefore most cost efficient because of the low capital expenditure. Each organization should be responsible for providing a team of experienced professionals and non-professionals. The teams would be autonomous, but their major goal would be to create a climate of co-ordination to provide the best possible care for terminally ill patients and their families. Essential features of the programme are team support, home health aides, communication, and co-ordination. It is extremely important that a hospice programme should emphasize services and patient management that enable patients to stay in their own homes as long as possible. This requires a home care team with many skills, and family acceptance.

DISCHARGE OF PATIENTS

1456. AGE CONCERN. GREATER LONDON. **Discharge from hospital: the social workers' view.** London, Age Concern Greater London, 1980. [ii], 22pp. £1.00

This survey of hospital social workers in London concerning the problems associated with the discharge of elderly patients finds that, for social workers, the most common areas of difficulty are: working with relatives; discharge at short notice; communication and reliance on already overstretched community services. Patients have problems in learning to cope with disability, readjustment after the institutional life of the hospital, short notice of discharge and the availability of ready cash. The survey also includes

procedures for home visits before discharge, the needs of the most vulnerable patients and safeguards after discharge. The role of volunteers is reviewed, and schemes organized by Age Concern in Leicestershire, Gateshead and Calderdale are described.

HOME CARE, AFTER-CARE

See also Abstract Nos. 1455, 1456, 1481, 1496

1457. RIKLAN, Manuel and others. **Urban hospital reaches out to its area's aged.** *Hospitals*, Chicago, Ill., 1980, May 16, vol. 54, no. 10, pp. 110-112.

St. Barnabas Hospital is a voluntary, 415-bed, acute care, community hospital that has served the Bronx for more than 110 years with a special interest in services for the elderly. In recent years, the hospital has developed a number of outreach programmes in collaboration with community groups. Most recently, it has established a gerontology health service centre. The three major components of the centre's outreach programmes are: (i) regular, comprehensive health screening of all members of each senior citizen's centre and all elderly persons who live in the centre's catchment area; (ii) health education at the hospital or at senior citizens' centres, church groups, clubs and other groups; and (iii) comprehensive, multidisciplinary ambulatory treatment, with an emphasis on health maintenance, at a satellite health centre, with others planned.

SPECIAL DEPARTMENTS

WARDS

See also Abstract No. 1374

1458. SHAW, Elizabeth. **Survey of mixed-sex wards, phase II, Leicester Royal Infirmary.** Leicester, Leicestershire Area Health Authority (T), South West District, 1980. [iii], 38pp.

Eleven mixed-sex wards were opened in the Leicester Royal Infirmary in 1979 for a trial period, on the understanding that a survey would be made of the attitudes of patients and staff. The staff survey, of a random sample of 66 medical, nursing and other staff, revealed a high level of satisfaction with the new arrangements; medical staff were the most strongly in favour, while nursing and other staff felt that their work was made more varied and interesting. The patient survey was by questionnaire sent to patients discharged from general surgery, orthopaedic, plastic, ENT and dental wards; each ward contained four six-bed bays and six single rooms, the bays being single-sex. The 328 questionnaires returned by male patients and 284 by female patients represented a response rate of 88 per cent; the questionnaire also sought attitudes to meals, waking times, visiting arrangements, toilet and washing facilities and information on illness and treatment. The survey showed overwhelming satisfaction with accommodation, facilities and treatment; only 5 per cent of patients expressed dissatisfaction with the arrangement of the sexes, and changes in the physical layout of the ward could meet some of the objections made.

OPERATING SUITES

1459. PHILLIPS, Jill. **Big is best? A study into the optimum size of multi-suite operating departments.** *NATNews*, Matlock, 1980, May, vol. 17, no. 5, pp. 7, 8, 10, 11, 13, 14.

A study was carried out in five district general hospitals and one 'Best Buy' hospital to discover the optimum size of a multi-suite operating department. The schedule of questions for managers of departments sought both facts and opinions and was divided into seven sections: (i) design of the department; (ii) staffing; (iii) management structure; (iv) staff morale; (v) communication; (vi) patient safety and care; and (vii) storage and supplies. The managers varied widely in their views of the ideal number of suites in a department. Five or six were generally favoured, but this depended upon design factors and the organization of the staff. All large departments complained of a shortage of storage space and changing and rest rooms. Delivery of supplies was a problem in the majority of departments. An adequate team of ancillary staff and an efficient reception service is vital in all large operating departments. When the design is good and the back-up service adequate, a large operating department has much to commend it, but this is rarely the case. A number of smaller units within the department is probably a better alternative.

ANAESTHESIA

1460. COHEN, Ellis N. **Anaesthetic exposure in the workplace.** Lancaster, MTP Press, 1980. xiv, 197pp. bibliogs. ISBN 0 85200 348 X £11.75

Amongst the health hazards from anaesthetic exposure suggested are spontaneous abortion, congenital abnormalities, liver disease, female cancer, and decreased mental performance. A wide range of experimental and epidemiological evidence is adduced to indicate the levels of risk. Other chapters define precise concentrations of gas occuring in various settings, and discuss the role of government in education, prevention and control. The final chapter is concerned with American legal considerations, including possible implications of failure to protect and inform the worker by the employer.

1461. EDLING, Christer. **Anaesthetic gases as an occupational hazard—a review.** *Scandinavian Journal of Work, Environment and Health*, Helsinki, 1980, June, vol. 6, no. 2, pp. 85-93.

During the last decade, interest has been focused more and more on the health hazards for operating theatre staff of anaesthetic gases. This paper reviews the literature on the following health effects of long-term exposure to anaesthetic gases: teratogenicity and mutagenicity; carcinogenicity; and other organ effects—liver, kidneys, bone marrow, central nervous system and peripheral nervous system. Even if there are methodological weaknesses in many of the epidemiological studies, many indicate a higher risk for spontaneous abortion among women exposed to anaesthetic gases. Less agreement is found on the increased risk for spontaneous abortion among women whose husbands have been exposed or on the increased risk of exposed women having malformed children. The same discrepancy applies to the reports on liver and kidney disease and the risk of cancer. However, the reports on a higher risk of cancer are

worth attention. Another growing concern is the possible central nervous system effects of long-term exposure to waste anaesthetic gases. A list of 68 references to the literature is included.

1462. SPENCE, A. A. **Uses of anaesthesia: postoperative care.** *British Medical Journal*, London, 1980, Aug. 2, vol. 281, no. 6236, pp. 367, 368.

Staff in recovery rooms must be aware of the respiratory problems likely to occur after anaesthesia. Even in routine cases, the administration of 30 to 40 per cent oxygen from a mask will be necessary. The cardiovascular system must also be monitored and deficiencies corrected. Arterial pressure and pulse rate should be checked every 20 minutes. Other indications of circulatory problems can be obtained by central venous pressure measurement and charting of fluid losses. Monitoring of the circulation is particularly important in patients who have undergone cardiac surgery. A large proportion of patients suffer unnecessary pain in the post-operative period owing to casual administration of narcotics. Small doses given intravenously give better relief than the intramuscular injection. Recently developed programmed automatic syringe systems allow administration of the narcotic by the patient himself. The most effective method of analgesia is nerve blockade by local anaesthetic. This may be an extradural or intercostal nerve block depending upon the site of the surgery. The recovery room today is an integral part of surgical practice and should ideally be situated near the intensive care unit.

PHARMACY

1463. VOGEL, David P. and others. **Pharmacy unit devises quality assurance plan.** *Hospitals*, Chicago, Ill., 1980, June 1, vol. 54, no. 11, pp. 83-85.

This article describes the quality assurance programme used by the pharmacy department at the University of Illinois Hospital, Chicago. A list of minimum standards of practice to be used in all the eight satellite pharmacies in the hospital was drawn up. The 18 items, listed here, reflect the consensus of the pharmacy department regarding priorities for services to in-patients. After the minimum standards had been established, one pharmacist and one technician spent 20 hours a week on the development and implementation of a compliance audit programme based on: (i) measurable criteria based on the minimum standards; and (ii) a second set of standards that showed acceptable levels of variance. Audit meetings are held regularly for each satellite pharmacy and the findings of the quality assurance team and its recommendations for change are discussed. The establishment of a quality assurance programme and audit has resulted in: (i) consistency in service among the eight pharmacies; and (ii) the recognition that the pharmacy makes a contribution to patient care beyond that of merely distributing drugs.

1464. ARIAS, I. **Hospital pharmacists role in clinical trials.** *Pharmacy International*, Amsterdam, 1980, Aug., vol. 1, no. 8, pp. v-vi.

In some European countries, drugs undergoing trials are, in general, not considered legally to be drugs, and the pharmacist cannot, therefore, be involved in the trials. This restriction should be overcome as it has been in other countries. The hospital

pharmacist should be directly involved in five areas of clinical trials: (i) study of the pharmaceutical aspects of the pre-clinical documentation; (ii) co-ordination of bioavailability and pharmacokinetic studies of the new drug and dosage forms; (iii) absolute responsibility for the storage, control and distribution of the forms of dosage being studied, and filing the necessary facts; (iv) responsibility for the code in double-blind trials; and (v) compiling data on secondary and toxic effects of the drug, derived from its use in normal therapy, in close collaboration with the pharmacy and therapeutics committee.

1465. VILSKA, Jussi. HYKS:n myrkytystietokeskuksen toiminta. **[The functions of the toxicological information centre at Helsinki University Central Hospital (HYKS).]** *Sairaala*, Helsinki, 1980, no. 5, pp. 202, 203.

After the Toxicological Information Centre was founded in Finland in 1961 the death rate among small children dying from poisoning decreased from 20 to 30 a year in the late 1950s to one or two a year in the 1970s. It is usually children under five who are involved in such accidents, so the people who consult the centre are normally either parents and guardians of the child (50 per cent); or doctors (50 per cent). The information is given by telephone. If the enquirer is the patient's doctor, the consultant provides information on the clinical pharmacology and toxicology of the poison, the symptoms, treatment based on experience, reports of rare cases, etc. So far the information centre has filled some 10 to 15 thousand cards, which are updated all the time. Since 1977 the centre has used the international POISNEX microfilmed cards, comprising some 200,000 compounds (30,000 pages). Most of this file is renewed four times a year. Originally the centre's consultants were the doctors of the out-patients' department in the Children's Hospital, plus doctors on duty. The staff now consists of a specialist, a full-time pharmacist, a part-time pharmacist and a full-time clerk. In 1961 the centre received 30 phone calls and in 1979, 9,598; the figure is expected eventually to rise to some 20,000 a year. At the moment, in two to three thousand cases a year, a telephone call to the centre is sufficient, and it is unnecessary to contact the doctor on duty. The centre now needs another full-time specialist; this could be arranged more flexibly by making a period of three to six months' service in the centre a compulsory part of the specialization course in paediatrics, clinical pharmacology and anaesthetics.

1466. KAUFFMAN, Garry W. and HESS, Dean. **Use of medication cards in a respiratory therapy training program.** *Respiratory Care*, Dallas, Tex., 1980, June, vol. 25, no. 6, pp. 660-663.

York (Pa.) Hospital School of Respiratory Therapy uses self-directed study techniques in a medication card programme to acquaint respiratory therapy students with pharmacological preparations. The list of preparations is divided into three modules. The students must complete each medication module within the four-month period allotted. They are provided with a list of representative pharmacology references to use as guidelines and a standard format on which to complete the medication care. After the cards are marked the students are encouraged to organize them in a box file for future reference. Staff who compiled the medication cards during their training have a better knowledge of pharmacological preparations than those who qualified before the scheme was introduced.

LABORATORIES

See also Abstract Nos. 1383, 1386, 1407, 1412

1467. CARTER, N. Wynne. **Computers in medical laboratories: the hare and the tortoise.** *Medical Laboratory Sciences*, London, 1980, July, vol. 37, no. 3, pp. 193-195.

This paper reviews briefly the current status of computers in medical laboratories in Britain. In particular, it contends that while hardware (the 'hare') has steadily become faster, smaller and cheaper, putting it to good use (the 'tortoise') has been a traumatic experience. The development of many applications in the early days can now be seen as establishing only the potential value of computer systems. A number of problems are mentioned. There are, however, signs of improvement in the situation, and it is concluded that the tortoise may yet have a chance.

1468. COLLINS, C. H. **Laboratory acquired infections.** *Medical Laboratory Sciences*, London, 1980, July, vol. 37, no. 3, pp. 291-298.

Recent trends in laboratory acquired infections are reviewed briefly. It is obviously sensible to classify micro-organisms according to the risk they present to the laboratory worker (and to other people) and to grade the precautions necessary for handling them accordingly. Various systems for doing this are described; none is quite straightforward. Only about 20 per cent of infections can be attributed to 'known' accidents. Most investigators have concluded that the remaining 80 per cent, attributed to 'unknown' causes, were due to routine microbiological procedures which resulted in production of microbe-containing aerosols, unnoticed by the laboratory worker. Four factors determine the possibility of infection: extent of contamination; route of infection; virulence of the organism; and host susceptibility. The laboratory worker may be protected from infection by: primary barriers around the infectious agent—good techniques and, where appropriate, microbiological safety cabinets; and secondary barriers around the worker—personal protection by good hygiene, good equipment, and adequate training.

1469. SPENCELY, Mary and others. **The clinical value of microbiological laboratory investigations.** *Journal of Infection*, London, 1979, March, vol. 1, no. 1, pp. 23-36.

For some years concern has been expressed about the ever increasing number of requests for laboratory investigations, not simply because of the manpower and cost implications, but also from a suspicion that not all investigations make a positive contribution to patient care. This study involved a random sample of 1,608 specimens submitted to five microbiological laboratories. Clinical staff on the team responsible for the request were questioned about reasons for the test and expectations of the results. After the laboratory had reported on the investigation more senior staff were asked about the contribution of the tests result to total patient care. The results of the study bring out three important facts: (i) it appears that a large proportion of requests for microbiological investigations are made as established non-discretionary or routine practices in patients who fit predetermined criteria, in order to exclude the presence of infections of which there may not be direct clinical evidence; (ii) clinicians had no clearly defined expectations of the results in many tests and, even when they had, their predictions, particularly of positive results, often did not accord with laboratory

findings; and (iii) clinicians appeared to gain little or no tangible assistance from the results of a substantial proportion of tests, particularly the routine tests. The implications of these findings are discussed with special emphasis on the need to review 'unit policy to screen' tests. Other approaches to the reduction of the number of tests which are unlikely to be of value in patient care are also discussed.

DIAGNOSTIC X-RAY DEPARTMENT

See also Abstract Nos. 1386, 1413

1470. JOST, R. Gilbert and others. **A computer system for transcribing radiology reports.** *Radiology*, Easton, Pa., 1980, July, vol. 136, no. 1, pp. 63-66.

The Mallinckrodt Reporting System, developed by the Mallinckrodt Institute of Radiology, St. Louis, Mo., is based on the single PDP-11/34 computer. The transcription stations have been designed using relatively simple, 'unintelligent' CRT terminals to reduce the overall cost of having a large number of terminals. Currently, 13 transcription stations are used on a daily basis. They are connected to the system by the telephone lines. Reports are dictated in the traditional manner by a radiologist and then entered into the terminals by a transcriptionist. Reports can be printed with a variety of line printers. To make reports available throughout the hospital, an on-line link has been established with the hospital IBM 370 system. As reports are transcribed, they are immediately transmitted to the IBM display system throughout the hospital. Inactive reports are stored by the computer on microfiche. At one institution, the system is used to produce all of the reports in the radiology department, a total of approximately 200,000 reports per year. The cost of installing a system of this kind is less than the cost of most of the more popular commercial reporting systems.

REHABILITATION

See Abstract No. 1479

OCCUPATIONAL THERAPY DEPARTMENT

1471. WOOLLEY, S. **Management action plan.** *British Journal of Occupational Therapy*, London, 1980, Aug., vol. 43, no. 8, pp. 255-258.

This paper presents a plan devised and implemented at Reigate Day Hospital, part of Netherne Hospital, Coulsdon, Surrey; it was undertaken as an integral part of a foundation management course. The object was to study occupational therapy staff resources and organization in relation to patient needs and implement a suitable plan. The initial outline covers: definition, objective, proposed changes in the organization, external influences, timing, information required, resources required, and consequences. Following informal discussion with occupational therapy, nursing and medical staff and formal discussion at the monthly policy meeting, the author prepared lists of services: (i) provided in an effective form; (ii) provided partially; and (iii) not currently provided. Once the need to establish more treatment facilities had been established, it was agreed to start two new groups—group therapy and a mother child group. To ensure that these new groups have treatment efficiency, a variety of assessment and

follow-up procedures have been, or are being produced. The benefits from carrying out the action plan are listed.

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 1484, 1485, 1497

1472. PRAISS, Israel L., FELLER, Irving and JAMES, Michael H. **The planning and organization of a regionalized burn care system.** *Medical Care*, Philadelphia, Pa., 1980, Feb., vol. 18, no. 2, pp. 202-210.

In the United States more than two million people are injured in burn accidents each year; 70,000 are admitted to hospital, involving nine million disability days; and an estimated 9,000 die from their injuries. The National Burn Information Exchange (NBIE), established in 1964, collects national and international data representing currently 40,000 cases from 133 hospitals in the United States, Canada and overseas. The organized data are a major and valuable information resource helpful for establishing criteria and policy guidelines for organizing burn care services based on need, severity and quality measures as reflected by outcomes of care. Based on NBIE analyses of current information, it is recommended: (i) that only 10 per cent of the acute general hospitals in the United States need be involved directly in the provision of specialized burn patient care; (ii) that three levels of care be established as determined by severity of injury and intensity of care; and (iii) that burn care should be organized within a comprehensive regionalized emergency medical service (EMS) system in accordance with the EMS Act of 1973 and the 1976 amendments.

1473. YOUNG, Steven R. and THILLIANDER, Brian D. **Patients, staff are focal point of new burn unit.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 93, 94, 96, 99.

The $22 million dollar addition/renovation project at Norfolk (Va.) General Hospital will incorporate a new eight-bed burn unit of approximately 4,000 square feet. Features of the unit aimed at reducing the likelihood of infection include: (i) careful control of the movement of people and supplies involving a pass-through concept to the clean side of the unit; (ii) all beds in single rooms designed to provide reverse isolation and each with its own anteroom; and (iii) a heating, ventilating and air-conditioning system providing air to different zones within the unit at three levels of pressure. Pressure will be highest in all patient rooms and sterile areas, corridors will be maintained at a lower pressure, and non-sterile areas at the lowest pressure. Expanded staff support space will enhance the effectiveness of nursing care; it will include a centrally located staff lounge opening directly onto the clean corridor. A plan of the unit is included.

INTENSIVE CARE UNITS

See also Abstract Nos. 1359, 1360, 1488

1474. EVANS, Sandra K., LAUNDON, Tom and YAMAMOTO, Willy G. **Projecting staffing requirements for intensive care units.** *Journal of Nursing Administration*, Wakefield, Mass., 1980, July, vol. 10, no. 7, pp. 34-42.

A method for determining nursing staff requirements in intensive care units has been

developed and implemented at the 650-bed North Carolina Memorial Hospital. It is unique in its specificity for critically ill patients and their fluctuating care demands. The system categorizes patients according to the level of care required rather than the level of care rendered. Four levels of care are used and each is related to a specific nurse to patient ratio rather than to a time allotment. After a two-month trial all nurses could accurately categorize their patients. Adaptable to any hospital's critical care environment, the methodology provides an effective budgetary tool to assess nurse workload and project long-range staffing requirements.

SPECIALIZED HOSPITALS AND UNITS

OUT-PATIENT

See Abstract Nos. 1451, 1477, 1490

CASUALTY AND ACCIDENT

1475. ALBERT, Edward H. **Appealing for treatment: a cognitive analysis of hospital emergency patients.** *Social Science and Medicine*, Oxford, 1980, May, vol. 14A, no. 3, pp. 243-251.

To examine the language people use in gaining attention in hospital emergency departments, 55 patients were interviewed in a general hospital in Ontario, Canada. Patients tended to describe how the injury occurred rather than the injury itself. Patients whose injuries were obvious by virtue of a bandage or similar, tended to offer no further explanation for their visit. When there was no outward evidence, the patient referred vaguely to the area of the injury, indicating that he knew 'this kind of thing' was treatable. These findings were not evidence of mis-use of emergency departments, because patients, although vague, knew that something was wrong and presented themselves for treatment. Lay explanations can often lead to medical misinterpretations, not through any lack of information on the patient's part, but through tendency to conceal the true problem in a web of ambiguity and vagueness.

1476. HOLLAND, Lin and ROGICH, Lee Ellen. **Dealing with grief in the emergency room.** *Health and Social Work*, Albany, N.Y., 1980, May, vol. 5, no. 2, pp. 12-17.

Emergency rooms have traditionally cared for the victims of sudden critical injury or illness, but their families have not routinely been the focus of emergency social work intervention. This paper provides a formula for this work which has been developed by emergency room social work staff at Harborview Medical Center, Seattle, Wash. Three stages of the initial process of grief have been identified: shock, effective reaction, and alpha (or the beginning process of) mourning. Also identified are various psychological and somatic symptoms of grief. Social work intervention is based on a six-step protocol, which is reproduced and discussed. The steps are: (i) notification of

family by registration staff; (ii) triage nurse informs social worker that family is on way to hospital; (iii) social worker or triage nurse escorts family to the family room when they arrive; (iv) if the patient is deceased, the worker first prepares the family by stressing the extreme seriousness of the injury and the patient's poor prospects for recovery; (v) if the patient is not deceased, the social worker orients the family to the uncertainty of the patient's condition and prepares them for the impact of the injury or illness on their lives; and (vi) if the patient is dying but is to be transferred to another service, the social worker initiates a referral to the appropriate social worker.

OCCUPATIONAL HEALTH

1477. STEWART, George E. **A hospital-based occupational health service can increase out-patient department utilization.** *Nursing Administration Quarterly*, Germantown, Md., 1980, vol. 4, no. 3, pp. 55-60.

The out-patient department of Family Hospital, Milwaukee, Wisc., was grossly underused for a variety of reasons. Discussion of means of improving its use led to the conclusion that a hospital-based occupational health service (OHS) seemed particularly attractive; the clinical director had industrial experience and the hospital is in a major industrial area. The OHS was designed to provide pre-employment and periodical physical examinations. Each firm using the service had a physician, selected on a rotational basis from the hospital staff, designated as its own physician. The only capital expenditure was for an audiometer and audiometric booth. Three nurses were trained as industrial audiometry technicians. Staff were also instructed in the special needs of industrially injured patients. The benefits of the service are potentially great although most of them are difficult to demonstrate or quantify.

DAY HOSPITALS

1478. MARKS, S. D. and others. **Ambulatory surgery in an HMO: a study of costs, quality of care and satisfaction.** *Medical Care*, Philadelphia, Pa., 1980, Feb., vol. 18, no. 2, pp. 127-146.

The Oregon Region of the Kaiser-Permanente Medical Care Program has made use of ambulatory surgery for more than 20 years. As of 1977, about 41 per cent of operating theatre surgical patients in the Program were not admitted to the hospital. This paper reports a retrospective examination of data from 100 per cent of the hospital admissions and 100 per cent of the ambulatory surgical procedures in the Program for the period 1966 to 1974. It examines the costs, quality of care, and satisfaction of providers and patients with ambulatory surgery. Cost savings for the ambulatory procedures averaged $192.19 per procedure (based on 1977 costs); national savings for 1977 were projected at $773, 947,208. In addition, ambulatory surgery absorbed an increasing demand for surgical procedures without requiring additional beds. No differences in quality of care were found between in-patients and ambulatory patients (both used the same operating theatres and staff), and both providers and patients were found to be very satisfied with ambulatory surgery services.

CHILDREN

See Abstract Nos. 1360, 1362, 1500

GERIATRICS AND LONG-STAY

See also Abstract Nos. 1388, 1456, 1457, 1499

1479. SCHUMAN, John E. and others. **Rehabilitative and geriatric teaching programs: clinical efficacy in a skilled nursing facility.** *Archives of Physical Medicine and Rehabilitation*, Chicago, Ill., 1980, July, vol. 61, no. 7, pp. 310-315.

A 210-bed skilled nursing facility instituted teaching programmes in rehabilitation and geriatric medicine while continuing a traditional programme. The new programmes, using 110 of the facility's beds, relied on full-time internal and physical medicine attending and house staff, distinct teaching sections of geriatric and physical medicine, a team approach with team audit, problem-oriented medical records, intensive in-service teaching, geriatric and rehabilitation out-patient departments, and a day hospital. For the entire facility, in the year following the programme change, permanent discharges increased by 52 per cent, discharges home increased by 134 per cent, and the mean length of stay decreased by 34 per cent. Over a three-month period from referral to long-stay care facilities, independence in activities of daily living improved among more patients treated in the new programmes with their rehabilitative approaches than in the other programmes for elderly patients. Similarly, patients were more likely to manifest improvement in the range of motion of joints in the new programmes.

1480. LIGUORI, M. **Building design and the needs of the elderly.** *Dimensions in Health Service*, Ottawa, Ont., 1980, July, vol. 57, no. 7, pp. 39, 40.

The author describes how the design of the Providence Villa and Hospital, Scarborough, Ontario, caters for the social and psychological, as well as the physical needs of the residents. Built in 1962, it is a home for 510 residents, including 330 in long-stay care, 122 in hospital beds, 80 chronic patients and 42 rehabilitation patients. Some long-stay patients in special care are in a ground floor area with their own facilities. The expansion of this area is planned as the number of confused patients is increasing. Clear guidance and suitable lighting and furniture are important features. Besides the large chapel, many rooms are being built for use by all denominations. The hospital is surrounded by its own farmland. Residents have their own rooms or share with up to five others. For the benefit of the staff, administrative offices and space for support services have been carefully planned.

1481. RICHARDS, Tom. **Hospital after-care schemes.** Mitcham, Age Concern England, 1980. 20pp. bibliog. (Action Guide) ISBN 0 904502 90 2 £0.95

The transition from the highly supportive environment of the hospital to home can be a difficult one, particularly for elderly people. This guide is intended to identify the role that voluntary organizations can play in easing transfers. Two case studies of schemes run by Age Concern are given.

CANCER

1482. GRUNDMANN, Ekkehard and COLE, Jack W., editors. **Cancer centers: interdisciplinary cancer care and cancer epidemiology.** Stuttgart, Gustav Fischer Verlag, 1979. [vi], 287pp. bibliogs. (Cancer Campaign Volume 3) ISBN 3 437 10611 2 £23.75

This book reflects the international efforts being made in the field of cancer treatment. The first part deals with the types and principles of cancer centres, and examples are given from the United States, Japan and Poland. Other sections have papers covering documentation and data gathering; the running of cancer centres and hospitals; cancer epidemiology; and interdisciplinary and outreach programmes.

EAR, NOSE AND THROAT

See Abstract No. 1361

CARDIOLOGY

See also Abstract No. 1427

1483. HABERMAN, Steven. **Putting a price on life.** *Health and Social Service Journal*, Basingstoke, 1980, July 4, vol. 90, no. 4700, pp. 877-879.

The author examines the cost-effectiveness of heart transplants to demonstrate that they are a sound economic investment. As there are not many heart transplant patients in Britain, the author uses the results from a series of 94 patients treated by Professor Shumway of Stanford University. The survival rate after one year was 63 per cent and 90 per cent of his long term survivors have resumed normal activity. The approximate current cost of a heart transplant at Papworth Hospital, Cambridge, is £14,600. The author compares the costs and benefits to the State of three alternatives for a young, family man earning £5,000 a year and requiring a heart transplant. The alternatives are: (i) he receives a transplant and has a 90 per cent chance of resuming work; (ii) he does not receive a transplant and lives two years as an invalid; and (iii) he dies now. Costs are calculated for the three alternatives for a period of four years. The calculations show that the heart transplant is cheaper than the other two alternatives. Also, if a longer period were used for assessment, the relative net cost of the transplant would decrease.

ORTHOPAEDICS

See Abstract No. 1411

UROLOGY

1484. RINGOIR, S. **Design and function of a hospital artificial kidney centre.** *International Journal of Artificial Organs*, Milano, 1980, May, vol. 3, no. 3, pp. 134, 135.

A hospital dialysis centre should consist essentially of the following parts: (i) a

number of dialysis stations in one or more rooms; (ii) a water preparation room; (iii) a dressing room with toilets; (iv) a waiting room; (v) a technicians' room and a room for files; (vi) supervision areas; (vii) a medical examination room; (viii) laundry and cleaning facilities; and (ix) offices and a small laboratory. In addition, the architect may have to create separate facilities for different groups of patients to be dialysed, for example, hepatitis-antigen positive patients, children and acute patients. Modular structures are generally preferable to allow for change and growth and, for best results, the design should be worked out between the architect, the doctor and the administrator. The design and structure will influence the number of nurses and other staff needed; the ratio of patients to nurses could vary from four to one, depending on the design and equipment used. An air-conditioning system is essential. The trend towards more single rooms and more general patient comfort bodes well for the future design and function of dialysis centres.

1485. JONES, P. G. W., ORR, D. L. J. and POWELL, E. G. P. **Assessment of environmental pollution by formaldehyde in renal dialysis units.** *Journal of Clinical and Hospital Pharmacy*, Oxford, 1980, June, vol. 5, no. 2, pp. 97-105.

Following reports from staff in a haemodialysis unit of unpleasant working conditions created by formaldehyde solutions, their general properties and methods of use were studied with a view to assessing potential hazards and making recommendations to ensure safe and acceptable systems of work. It was found that spillage from manual washout systems and fluids exposed during semi-automated washouts were the greatest source of contamination. Inadequate air exchange also allowed accumulation of atmospheric formaldehyde to rise above the threshold limit values ceiling of two ppm and to reach 25 ppm. Improvements in the air extraction systems, the introduction of closed drainage, and staff guidance resulted in safe working conditions. Additionally a planned monitoring programme and an ongoing staff training scheme are recommended wherever formaldehyde is used in appreciable quantities.

SURGERY

See also Abstract Nos. 1394, 1478, 1483

1486. CABAUP, Romain and DECOUVELAERE, Martine. Le laser et le monde médical. **[The laser and medicine.]** *Hôpital à Paris*, Paris, 1980, March/April, no. 56, pp. 157-161.

An introduction to the principle of the Laser (Light Amplification by Stimulated Emission of Radiation) and its applications in medicine. Different types of lasers are employed in different specialties, for example in ophthalmology argon and ruby lasers, and in neurosurgery the CO_2 laser. The advantages of laser surgery are accuracy, rapid cicatrization, the relative absence of pre- and post-operative complications, and ease of access to normally inaccessible areas of the body by means of mirrors. It is desirable that specialists in more than one discipline should share the same costly laser equipment. The Assistance Publique is currently experimenting in St. Antoine Hospital with the joint use of a CO_2 laser by the gynaecology and ENT departments.

MATERNITY

See also Abstract Nos. 1362, 1451, 1489

1487. SACK, Robert A. **The effect of utilization on health care costs.** *American Journal of Obstetrics and Gynecology*, St. Louis, Mo., 1980, May 15, vol. 137, no. 2, pp. 271-275.

A study of the effect on costs of the use of two types of obstetric delivery, vaginal and caesarean section, was carried out at a 347-bed hospital affiliated to the School of Medicine at the University of South California. The effect on cost of the use of hospital facilities was also examined. Five physicians who attended 494 primiparous patients delivered more than 95 per cent of the 1,310 infants born in the hospital in 1978. Caesarean section was the more expensive type of delivery and the percentage performed by the physicians varied from 16 to 40 per cent. The highest and lowest hospital charges incurred by 100 patients undergoing abdominal hysterectomies varied by 26 per cent, a disparity which reflected the degree of use of the facilities by individual physicians. Health care planners are well aware that use affects costs, but this is not always clear to the physician. A discussion among five physicians follows this paper.

1488. HAYNIE, William E. and HAYET, Leonard. **Neonatal ICU meets present, future demands.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 145-147.

The need for flexibility to accommodate both progress and demand dictated a modular design for the new neonatal intensive care unit at Jackson (Fla.) Memorial Hospital. The unit will include nine modules that function as sub-nursing stations. Each module will accommodate enough equipment and supplies to meet the maximum needs of two patients and will be manned by one nurse. It will also be possible to use each module for as many as four patients who require less than the unit's full technological resources. Each module is 21 feet long and includes two patient consoles. One module is set against a wall; the other eight are set in back-to-back pairs. Service functions will be concentrated in a separate service area adjacent to the patient care area and with separate clean and dirty circulation patterns. Beyond the service area will be a support area. A partial floor plan of the unit is included.

GYNAECOLOGY

1489. DAHAN, Jean. L'échographie en gynécologie-obstétrique. **[Ultrasound in gynaecology/obstetrics.]** *Hôpital à Paris*, Paris, 1980, March/April, no. 56, pp. 149-153.

The author explains the main applications of ultrasound in obstetrics and gynaecology. The central radiology departments employ mainly B-scan echography and can deal with a maximum of 15 patients a day; maternity units can see 25 patients a day because they use D-scan, which is faster. The number of echographic explorations required per annum can be calculated from the number of deliveries. It is suggested that sufficient equipment to allow two scans per patient is required. At least two years are needed to train a good echographer and in many departments the apparatus is handled only by the medical staff. The author suggests that interns should be trained to use this equipment for emergencies.

DENTISTRY

1490. TOFANINI, P., DATTRINO, G. and PARODI, A. Problemi di disinfezione nella practica ambulatoriale odontoiatrica. **[Problems of disinfection in an out-patient dental department.]** *Ospedale*, Torino, 1980, June/July, vol. 33, no. 6/7, pp. 191-195.

The authors discuss the advantages and disadvantages of the different methods currently available for the sterilization of dental instruments; they recommend dry sterilization in preference to the Flaherty procedure or trioximethylene. They point to the dangers of cross-infection in the hospital via the dentist. Out of 500 patients examined in one dental department, five per cent were found to be carriers of viral hepatitis, and therefore highly dangerous.

PSYCHIATRY

See also Abstract No. 1399

1491. HEIMAN, Elliott M. **CMHC in-patient unit: private hospital for the poor?** *Hospital and Community Psychiatry*, Washington, D.C., 1980, July, vol. 31, no. 7, pp. 476-479.

The 24-bed in-patient unit of a community mental health centre (CMHC) is located in a general hospital in a city of 500,000. It is closely tied to a large, busy CMHC out-patient clinic, a neighbourhood centre, and a rural mental health programme. It accepts all referrals from clinicians working in affiliated out-patient units. Data on patients treated in the unit between January and December 1975 were compared with those of patients treated in four other psychiatric in-patient facilities in the city: a unit in a county public general hospital, a unit in a private university teaching hospital, and two free-standing private hospitals. The study showed that patients admitted to the CMHC unit more closely resembled the population of the private psychiatric facilities in age, sex and diagnosis, but in social class they were more like patients in public facilities. It is suggested that CMHC in-patient units may be filling a useful role by making brief hospital stays available to neurotic patients of the lower socio-economic classes who were previously denied hospital care.

1492. NOTHERN IRELAND. DEPARTMENT OF HEALTH AND SOCIAL SERVICES. **Psychiatric hospitals in Northern Ireland: a survey of physical facilities and estimates of future demand.** [Belfast], Department of Health and Social Services, 1979. [ii], 109 pp.

The aims of this study are: (i) to examine the physical facilities of Northern Ireland psychiatric hospitals and their suitability for modern psychiatric practice; (ii) to estimate the future in-patient demand; (iii) to match assessed physical capacity against future estimated demands; and (iv) to make recommendations regarding catchment areas and the need for any additional physical resources. Tables giving details of facilities and patients are set out for each of the nine hospitals and units surveyed. Among the report's conclusions are: (i) despite past progressive reductions in bed numbers, there is still a degree of overcrowding; (ii) it is mainly in long-stay wards that

further reduction is necessary to achieve a reasonable standard of bed spacing; (iii) the 'old' long-stay populations are falling at all hospitals by natural attrition; (iv) the age distribution of estimated future long-stay populations is expected to show little change from today; (v) it is probable that future changes in the age structure of the population will result in an increase in the numbers of the elderly mentally infirm; and (vi) this expected increase in demand is likely to be experienced by hospitals which have the least capacity to deal with it. Recommendations are made for areas and individual hospitals.

1493. SOOTHILL, K. L., WAY, C. K. and GIBBENS, T. C. N. **Subsequent dangerousness among compulsory hospital patients.** *British Journal of Criminology*, London, 1980, July, vol. 20, no. 3, pp. 289-295.

A national survey of hospital orders made in the 12-month period April 1963 to March 1964 showed that of 673 compulsory admitted patients discharged in the first and second years only 10 had been subsequently convicted of serious violence, nine of a serious sex offence and five of arson. This paper reports a replication of the earlier study applied to another and later group of hospital orders. Using the same measure of subsequent offences 'which caused real harm to people' it was found that (in a three-year follow-up admission) there was a serious failure rate of five per cent compared with two per cent in the earlier study. It is suggested that this difference is quite understandable in view of the fact that the later sample was discharged from hospital somewhat more quickly and had a slightly higher proportion of bad risks. However the cumulative total of serious failures was 10 per cent by the end of five years after admission and 15 per cent by the end of seven years. The present study simply indicates that it is necessary to follow up a cohort of compulsory hospital admissions over a much longer period to recognize the cumulative build-up of 'serious failures'.

1494. HITCH, P. J. and CLEGG, P. **Modes of referral of overseas immigrant and native-born first admissions to psychiatric hospital.** *Social Science and Medicine*, Oxford, 1980, July, vol. 14A, no. 4, pp. 369-374.

A survey was made of all first admissions for psychiatric illness to a psychiatric bed from 1 January 1968 to 31 December 1970 of persons aged 16 to 64 years of age normally resident in Bradford. Comparisons were made between the following groups of patients: native-born, New Commonwealth-born and foreign-born. Three diagnostic categories were used: (i) schizophrenia, paranoia, schizo-affective psychosis; (ii) affective states—affective psychosis, and various depressive entities; and (iii) other disorders—other psychoses, other neuroses, personality disorders, other psychiatric disorders. Police and social workers were involved in the referral of New Commonwealth-born patients to a significantly greater extent than with the other groups. This finding applied across the range of diagnostic categories, and was not necessarily associated with compulsory admission. It was hypothetized that the pattern was associated with the concentration of immigrants in inner-city districts; this was not supported. Emergency admissions from the casualty ward of a general hospital were rare among immigrants from the New Commonwealth. It is suggested that general practitioners tend routinely to call social workers to admissions from cultural minorities. The reasons for police involvement are more complex.

1495. WESPI, Marianne. Soins infirmiers: les tendances de l'évolution en psychiatrie. **[Nursing care: trends in evolution of psychiatry.]** *Schweizer Spital*, Aarau, 1980, vol. 44, no. 2, pp. 32-34.

The conception, teaching, organization, and practice of nursing care have been overthrown by developments in science and technology. The time has come for nursing care to be recognized as a specific service and the nurse's role within a multidisciplinary team identified. The changes in the treatment of psychiatric patients have meant that the nurse is now much more aware of the importance of her role. The traditional training is no longer adequate and should now include education in self-awareness, awareness of others, and interpersonal relations. The nurse could play a greater role in the prevention of psychiatric diseases, and a very active role in treatment, since her influence with the patients is considerable. The profession should be given a position which reflects the importance of the role which it plays in the medical world.

1496. BROWN, John. **Hospital and community: the integration of services.** London, National Society for Mentally Handicapped Children and Adults, 1980. [ii], 22pp. bibliog. (Mencap Information Exchange Report) £2.50

Mencap Information Exchanges originated out of the need to obtain, in a rapidly changing environment, effective current information on developments in services for retarded people. The intention of this multidisciplinary exchange was to examine the extent to which there may now be evidence, at 'grass roots', of progress being made in the integration of hospital and community; this against the rich, but confusing background of observation, theory and policy. The response to the session was such that selections only from the viewpoints sent in by participants can be included in this report. They include descriptions of a special unit in south-west London and services in the London Borough of Camden.

1497. HAMILL, James P. and MATTHEI, Edward H. **Mental health unit serves many needs.** *Hospitals*, Chicago, Ill., 1980, Feb. 16, vol. 54, no. 4, pp. 126, 129, 130, 132, 134.

An addition to Mercy Hospital, Davenport, Iowa, is planned to contain 265 single patient rooms and will consist of four separate zones: nursing tower; out-patient service care; stores area; and mental health/alcoholism wing. This paper focuses on the 60-bed mental health/alcoholism wing, which consists of four pods: a 15-bed alcoholism unit; two units with 20 single rooms in each for mental health patients; and a core area containing activity areas, consultation rooms, offices and a five-bed psychiatric intensive care unit. Features of the design include flexibility and efforts to minimize the institutional aspects of the facility. Floor and site plans of the unit are included.

1498. **Where now for psychiatric nursing?** *Nursing Mirror*, Haywards Heath, 1980, June 26, vol. 150, no. 20; supplement, pp. i-vii, x-xii, xiv-xvi.

This supplement on the future of psychiatric nursing consists of four articles. The first outlines the situation in Scotland, where the demand for hospital psychiatric services has increased, but so has the rate of turnover. New accommodation will be needed most in caring for the elderly. The number of nurses in the psychiatric service has remained constant over the last decade. The need to obtain the right numbers of staff with the appropriate training is the major challenge for the future. The second

article outlines the history of psychiatric nursing from 1891, through the physical treatment period of the 1930s, the growth of the therapeutic community idea after 1945 and the development of the use of drugs in the 1950s. Despite the slowness of developments in community-based psychiatric care and the poor image of the large psychiatric hospital, the value of community psychiatric nurses is now recognized and the training of nurse therapists in behaviour modification is established. The third article discusses the management of the psychiatric hospital as part of the district health service with reference to the report of the Working Group on Organizational and Management Problems of Mental Illness Hospitals. The final article describes how clinical nurses trained in psychiatry can work as therapists in: (i) screening patients; (ii) identifying their problems; and (iii) planning and monitoring treatment schedules.

1499. FLOWERS, J. and SAUNDERS, E. **Long term psychiatric patients serviced by the psychiatric unit at Queen Elizabeth II Hospital, Welwyn Garden City, Hertfordshire.** *Social Services Research Group Journal*, Carlisle, 1980, May, no. 9, pp. 6-15.

A research project was set up at the Queen Elizabeth II Hospital, Welwyn Garden City, to identify the proportion of patients in the Psychiatric Unit who could be considered long term. All patients who had had three in-patient stays or who had been in contact with the Unit for over three years were called long term, for the purpose of the study. Of 719 patients using the hospital in the year from October 1976 to September 1977, 367 were long term psychiatric patients. The results of a study of these patients, given in five tables, show that: (i) the largest group of long term patients suffer from psychoneuroses; (ii) distribution by age group peaks between 25 and 34 years and 45 and 54 years; (iii) there are more females in each diagnostic group, with the exception of drug dependency and alcoholism; (iv) patients suffering from psycho-neuroses are treated by contact rather than repeated admission; and (v) the duration of admission alters according to frequency. In short, just over half the patients using the Psychiatric Unit services need long term support, but not necessarily as in-patients.

1500. HOLLAND, J. M. and HATTERSLEY, J. **Parent support groups for the families of mentally handicapped children.** *Child: Care, Health and Development*, Oxford, 1980, May/June, vol. 6, no. 3, pp. 165-173.

This article describes the work and aims of a parent support group drawn from four families in Birmingham with handicapped children in the age range six to 10 years. Two clinical psychologists involved in the seven monthly group sessions were guided by a theory of behavioural intervention. Advice and guidance was given to parents on skill deficits and behavioural problems in the children, and also on their own changes in behaviour. All the areas discussed at a group session were initiated by the parents. They were then asked to make further observations, after which a scheme of intervention was devised. After each session the parents received a set of notes detailing the main points discussed. Evaluation of the group sessions took the form of an interview after the third session, an assessment of the children after the sixth session and the sending of a questionnaire after the final session. Discussion and advice on the management of the children and the provision of support were seen by all the families as the most important functions of the group. Some improvement in behaviour occurred in all the children. All parents would have liked more information about services available to the handicapped and their families.

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